PWR STEAM GENERATOR CHEMICAL CLEANING

PHASE I FINAL REPORT

JULY 1978

SAMUEL ROTHSTEIN

WORK PERFORMED UNDER CONTRACT
EN - 77 - C - 02 - 4325

CONSOLIDATED EDISON CO. OF NEW YORK
4 IRVING PLACE
NEW YORK, N. Y. 10003

MASTER

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UNITED NUCLEAR INDUSTRIES, INC.

UNI LITERATURE SEARCH FOR

INDIAN POINT NOS. 1 AND 2

CONSOLIDATED EDISON COMPANY OF NEW YORK

UNITED NUCLEAR INDUSTRIES, INC.
A SUBSIDIARY OF UNITED NUCLEAR CORPORATION
COMMERCIAL DIVISION
1201 JADWIN AVENUE RICHLAND, WASHINGTON 99352 (509) 946-7661

September 1, 1977

Consolidated Edison Company
of New York, Inc.
4 Irving Place
New York, New York 10003

Attention: Mr. Paul F. McTigue

Dear Mr. McTigue:

Attached is a report of UNI's initial efforts on Phase I for purchase order No. 7-08210 involving chemical cleaning of the secondary side tube to tube support crevices of Indian Point Nos. 1 and 2. This report presents the results of a literature search conducted to determine if there were any additional cleaning solvents which we should add to candidates previously included in Con Ed's RFP and our technical proposal.

Any questions you may have regarding the literature search or its results may be referred to me at (509) 946-7661.

Very truly yours,

Alvin P. Larrick

Alvin P. Larrick
Project Manager

Enclosure

UNI LITERATURE SEARCH FOR INDIAN POINT NOS. 1 AND 2 CONSOLIDATED EDISON COMPANY OF NEW YORK

I. INTRODUCTION

United Nuclear Industries (UNI) entered into a subcontract with Consolidated Edison Company of New York (Con Ed) on August 8, 1977, for the purpose of developing methods to chemically clean the secondary side tube to tube support crevices of the steam generators of Indian Point No.s 1 and 2 PWR plants. This document represents the first reporting on activities performed for Phase I of this effort. Specifically, this report contains the results of a literature search performed by UNI for the purpose of determining state-of-the-art chemical solvents and methods for decontaminating nuclear reactor steam generators. The results of the search sought to accomplish two objectives: (1) identify solvents beyond those proposed at present by UNI and Con Ed for the test program, and (2) confirm the appropriateness of solvents and methods of decontamination currently in use by UNI.

II. SUMMARY

A literature search for sources of information on solvents for decontamination of nuclear reactors was conducted by United Nuclear Industries for Consolidated Edison. Three data bases of information sources on chemical decontamination were found and searched for applicable information. As a result of this search, seven specific references were identified as applicable to the Con Ed decontamination effort. Abstracts of these sources are given in this report and bibliographies of open literature information on decontamination are presented in the Appendix.

III. DISCUSSION

A literature search was begun August 8, 1977, for sources of information about chemical solvents and methods of decontamination. Three data bases were identified. These are:

- National Technical Information Service, "Decontamination," August 10, 1977.
- ERDA Energy Data Base.
- ERDA Radcon.

Each of these data bases are computer-generated bibliographies and have been reproduced in the Appendix for future reference. Individual information sources were selected from these bases for further perusal according to the following criteria:

- Recentness of publication.
- Application to nuclear power plants similar to Indian Point Nos. 1 and 2.
- Applicability of decontamination methodology to Con Ed requirements.
- Applicability of solvent to Con Ed requirements.

IV. RESULTS

The 30 selected documents were read and studied according to the above criteria. From this number seven were selected for use in the UNI efforts on Phase I tasks. The specific reports and an abstract of each are given in Table I. The reports are listed in the order of significance UNI places on their usefulness and application to Phase I efforts.

V. CONCLUSIONS

The literature search has yielded additional information on potential solvents that UNI will suggest for developmental testing during Phase I work. However, most of the documentation on decontaminaton published after 1970 involves proprietary information on solvents; thus, its use to the literature search was limited. UNI has learned that West German information sources on this subject may become available in the near future through the Electrical Power Research Institute (EPRI).

TABLE I

APPLICABLE DECONTAMINATION LITERATURE

Title of Document	Author	Descriptive Abstract
BNWL-1917, Decontamination and Decommissioning of Nuclear Facilities - A Literature Search		Unclassified references are presented in chronological order covering the period from 1944 through 1974. Subject and author indexes are provided. 140 pp. May 1975.
Decontamination of Nuclear Reactors and Associated Equipment	J. A. Ayres, Editor Ronald Press New York	An authoritative presentation of decontamiantion theory and experience. 825 pp. 1970.
BNWL-B-00090, Equipment Decontamination with Special Attention to Solid Waste Treatment: Survey Report	J. A. Ayres	A summary of all pertinent information on methods of decontamiation of radioactively contaminated eqipment. Contamination mechanisms, equipment decontamination procedures and types of decontamination chemicals are discussed. 91 pp. June 1971.
Seminar on Decontamination of Nuclear Plants	Cosponsored by EPRI, ASME and Ohio State University Columbus, Ohio	Outlines of prepared talks and selected reference articles illustrating economic and technical considerations are presented. 274 pp. May 7-9, 1975.
Proceedings of the American Power Conference Volume 37	Illinois Institute of Technology	Aspects of the Dresden 1 primary system decontamination plans are discussed in three presentations from the 1975 conference. Work in the area of corrosion protection and solvent development is described. pages 276-288. 1975.
BNWL-CC-2659, Decontamination Studies for N Reactor	J. A. Ayres	Numerous solvent solutions were evaluated for decontaminaton effectiveness and corrosion on carbon steel. May 1970.

APPENDIX

"DECONTAMINATION"

(NATIONAL TECHNICAL INFORMATION SERVICE)

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DECONTAMINATION

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ACCESSION NUMBER	BNWL-2092
TITLE	High-Level Waste Vitrification by Spray Calcination/in-Can Melting
AUTHORS	Larson, D. E.; Bonner, W. F.
ORGANIZATIONAL SOURCE	Brookhaven National Lab., Upton, N.Y.*Energy Research and Development Administration.
PAGINATION/DATE	Nov 76; 144p
ISSUE	U7714
NTIS PRICES	NTIS Prices: PC A07/MF A01
CONTRACT/GRANT NOS.	EY-76-C-06-1830
CATEGORY CODES	18G; 77G; 68F
INDEX TERMS	*Radioactive waste processing; Boron silicates; Calcination; Containers; Decontamination; Demonstration programs; Equipment; Flowsheets; Fuel reprocessing plants; Glass; Leak testing; Liquid wastes; Melting; Power reactors; Radioactive waste storage; Seals; Solidification; Spray drying
SUPPLEMENTARY TERMS	ERDA/052001; ERDA/050800; NTISERDA

ABSTRACT

Federal regulations require that high-level liquid waste (HLLW) be converted to a solid for custody in a Federal repository. The Spray Solidification/In-Can Melting process has been developed and is being demonstrated for commercial application. The bases used are similar to those of the NFS plant and to anticipated regulations for waste canister receipt at a Federal repository. The reference NFS flowsheet combines plant HA Column Wastes, Low-Level Wastes, and various HLLW process recycle streams to produce a borosilicate glass. After the canister is filled and sealed, the lid weld will be inspected and decontaminated. Equipment and instrumentation for feed supply to the calciner, calcination, melting, welding, weld inspection, canister decontamination, and in-cell canister storage are being designed and demonstrated. Preliminary facility layouts, equipment design data, and instrumentation needs are provided for major process equipment systems. Additional demonstration work is being performed to verify and complete the plant scale equipment design, including full-scale nonradioactive equipment testing, nonradioactive facility mockup for equipment remote operation and maintenance demonstration, and pilot plant production of waste glass from commercial fuel HLLW. The technology for spray calcination and in-can melting is ready for commercial application. Required additional work is described. A preliminary evaluation is made of materials that may be released

from the process from normal and abnormal operations in the facility. 34 figures. 20 tables. (ERA citation 02:021814)

ACCESSION NUMBER	MLM-2382
TITLE	Tritium Waste Control Project Progress Report: April--June 1976
AUTHORS	Bixel, J. C.; Kershner, C. J.
ORGANIZATIONAL SOURCE	Mound Lab., Miamisburg, Ohio.*Energy Research and Development Administration.
PAGINATION/DATE	10 Dec 76; 27p
ISSUE	U7713
NTIS PRICES	NTIS Prices: PC A03/MF A01
CONTRACT/GRANT NOS.	EY-76-C-04-0053
CATEGORY CODES	18G; 77G; 68F
INDEX TERMS	*Fuel reprocessing plants; *Radioactive waste processing; *Tritium; *Tritium compounds; Calorimeters; Catalysis; Catalysts; Chemical reaction kinetics; Comparative evaluations; Containers; Cost; Decontamination; Dissociation; Economics; Electrolysis; Gaseous wastes; Infrared spectra; Isotopic exchange; Laser isotope separation; Photolysis; Radiation monitors; Radioactive effluents; Regenerative fuel cells; Testing; Transport; Tritium recovery
SUPPLEMENTARY TERMS	ERDA/052000; NTISERDA
ABSTRACT	Tritiated Liquid Waste Decontamination (Molecular Excitation): A preliminary economic study of water detritiation by laser isotope separation indicates possible advantages over the catalytic exchange process. The electric power requirements are a factor of 5 lower, resulting in a 50-percent reduction in operating costs. Capital costs for the two methods appear comparable. Additional attempts were made to determine the ir spectrum of HTO around the nu sub 1 band. However, carbon dioxide impurity obscured the HTO absorption around 2265 cm exp -1 making it impossible to obtain a high quality spectrum for use in the LIS experiments. Electrolysis of High Level Tritiated Water: In an experiment using a regenerative cell on water containing approximately 0.3 g tritium, about 21 ml of water was electrolyzed but the solid polymer electrolyte ruptured and cell components were damaged beyond repair. Tritium Monitor Development and Calibration: The calibration system design was modified to allow procurement and fabrication of the major components during FY-1976. Shipping Container

Development for Tritiated Liquid Waste: The bourdon tube pressure gage was replaced with a pressure transducer for double containment. A calorimeter was completed for tritium assay of contents. Catalytic Exchange Detritiation Studies: The Englehard hydrophobic catalyst for HT/H sub 2 O exchange is being tested. An experiment to establish the height of one equilibrium plate was completed. (ERA citation 02:019395)

ACCESSION NUMBER AD-A038 452/9SL
TITLE Civil Defense for the Schoolboy
TITLE ANNOTATION Civil Defense for the Schoolboy--Translation
AUTHORS Goncharenko, G. I.
ORGANIZATIONAL SOURCE Army Medical Intelligence and Information Agency Washington D C
PAGINATION/DATE 28 Mar 77; 33p
ISSUE U7713
NTIS PRICES NTIS Prices: PC A03/MF A01
NOTES Trans. of Atomizdat (USSR) p1-32 1968.
REPORT NOS. USAMIIA-K-7035
CATEGORY CODES 15C; 5K; 5I; 91I
INDEX TERMS *Civil Defense; Mass destruction weapons; Nuclear weapons; Biological warfare agents; Chemical warfare agents; Shelters; Protection; Students; Decontamination; Education, Training; Translations; USSR
SUPPLEMENTARY TERMS NTISDODXA
ABSTRACT No abstract available.

ACCESSION NUMBER DP-1436
TITLE Decontamination of Savannah River Plant Waste Supernate
AUTHORS Wiley, J. R.
ORGANIZATIONAL SOURCE Du Pont de Nemours (E.I.) and Co., Aiken, S.C. Savannah River Lab. *Energy Research and Development Administration.
PAGINATION/DATE 1976; 19p
ISSUE U7710
NTIS PRICES NTIS Prices: PC A02/MF A01
CONTRACT/GRANT NOS. E(07-2)-1
CATEGORY CODES 18G; 7A; 77G
INDEX TERMS *Cesium 137; *Plutonium; *Radioactive waste processing; *Strontium 90; Adsorption; Evaporation; Fluid flow; Gamma detection; Ion exchange; On-line measurement systems; Precipitation; Ruthenium 106; Savannah river plant; Sludges; Solidification
SUPPLEMENTARY TERMS ERDA/052001; NTISERDA
ABSTRACT Cesium-137, strontium-90, and plutonium were

removed from 100-liter quantities of actual waste supernate by ion exchange in tests of the conceptual process for solidification of Savannah River Plant (SRP) radioactive waste. The supernate had been slurried with actual SRP sludges, and these sludges were separated from supernate by centrifugation and sand filtration. These steps simulated tank cleaning and isolating the insoluble waste sludge. Ion exchange reduced radioactivity in the supernate by a factor of 4 x 10 exp 5 for exp 137 Cs, 5 x 10 exp 3 for exp 90 Sr, and 300 for plutonium. These results were insensitive to flow rate over the range of rates studied. The process was monitoring with an in-line gamma detector. Salt cake made from the decontaminated supernate would contain about 6 nanocuries/gram from the combined activities of exp 137 Cs, exp 90 Sr, and plutonium. exp 106 Ru was not removed; it will decay to a level below that of other nuclides in decontaminated salt stored for 12 years. exp 137 Cs, exp 90 Sr, and plutonium were eluted from the ion exchange columns, concentrated by evaporation of the eluate, and sorbed onto zeolite. This concentrated the radioactivity removed from supernate by a factor of 1500. Carrier precipitation was tested for removing exp 90 Sr from supernate, but was not effective. (ERA citation 02:012527)

ACCESSION NUMBER	BNWL-2126
TITLE	Nuclear Waste Management and Transportation Quarterly Progress Report, April--June 1976
AUTHORS	Platt, A. M.
ORGANIZATIONAL SOURCE	Battelle Pacific Northwest Labs., Richland, Wash.*Energy Research and Development Administration.
PAGINATION/DATE	Oct 76; 37p
ISSUE	U7710
NTIS PRICES	NTIS Prices: PC A03/MF A01
CONTRACT/GRANT NOS.	E(45-1)-1830
CATEGORY CODES	18G; 77G; 68F
INDEX TERMS	*Radioactive waste management; *Radioactive wastes; Casks; Decontamination; Design; Economics; Research programs; Safety; Trains; Transport; Waste transportation
SUPPLEMENTARY TERMS	ERDA/052000; ERDA/050900; NTISERDA
ABSTRACT	Status of the following programs is reported: Alternative waste management systems; decontamination and densification of [illegible] cladding residues; disposition of

retired contaminated facilities at Hanford; transportation safety studies; transport problems, 1976-2000; safety and economic study of special trains; and development of high-level waste shipping cask models. (ERA citation 02:012519)

ACCESSION NUMBER ARH-ST-139
TITLE Research and Engineering Division Semiannual Report. KK Process Development and Technology, November 1, 1975--April 30, 1976
AUTHORS Manry, C. W.; Cramer, G. W.
ORGANIZATIONAL SOURCE Atlantic Richfield Hanford Co., Richland, Wash.*Energy Research and Development Administration.
PAGINATION/DATE Jun 76; 137p
ISSUE U7710
NTIS PRICES NTIS Prices: PC A07/MF A01
CONTRACT/GRANT NOS. E(45-1)-2130
CATEGORY CODES 12G; 77G; 68F
INDEX TERMS *Americium; *Cesium; *Ducks; *Plants; *Plutonium; *Radioactive waste management; *Reprocessing; *Strontium; *Technetium 99; Animals; Cesium 137; Decontamination; Leaks; Radioactive waste processing; Radioactive waste storage; Radionuclide kinetics; Recovery; Research programs; Soils; Solvent extraction; Underground disposal; Uptake
SUPPLEMENTARY TERMS ERDA/050600; ERDA/052000; NTISERDA
ABSTRACT This document is the final semiannual report of the activities supported by KK funds in the areas of process development. These activities have the goal of improving the performance of the ARHC plutonium processing and waste management programs. (ERA citation 02:012476)

ACCESSION NUMBER MLM-2358
TITLE Tritium Waste Control Project Progress Report: January--March, 1976
ORGANIZATIONAL SOURCE Mound Lab., Miamisburg, Ohio.*Energy Research and Development Administration.
PAGINATION/DATE 27 Sep 76; 21p
ISSUE U7708
NTIS PRICES NTIS Prices: PC A02/MF A01
CONTRACT/GRANT NOS. E(33-1)-GEN-53
CATEGORY CODES 7D; 18G; 99F; 77G
INDEX TERMS *Radioactive waste processing; *Tritium recovery; Control; Decontamination; Isotopic exchange; Liquid wastes; Research programs; Tritium; Tritium compounds; Tritium oxides

SUPPLEMENTARY TERMS ERDA/052001; ERDA/052002; Monitoring; NTISERDA

ABSTRACT A series of experiments was conducted to determine the amount of tritium needed in the spectrometer cell to obtain the infrared spectrum of HTO in the 1 to 5 mu m region. Experiments using HDO as a surrogate indicated that 400 mCi of tritium would be required. Test loading experiments with HTO were performed and monitored with an ionization chamber. Adsorption of water on the surfaces was found to be a serious problem in obtaining quantitative material balances in the system. Improved real-time tritium monitoring systems were installed in the Tritium Control Laboratory to monitor stack effluents, room air, and process streams. Design and layout of components were completed and procurement was begun for a tritium handling and gas recirculation system which will permit calibration of all types of tritium monitors, performance evaluation of monitoring components, and the study of the effect of various monitoring conditions. (ERA citation 02:009270)

ACCESSION NUMBER ERDA-tr-193

TITLE Physical Characteristics of Regenerated Fuel of Fast Power Reactors

AUTHORS Bakumenko, O. D.; Ikhlov, E. M.; Kulakovskii, M. Ya.; Troyanov, M. F.; Tsikunov, A. G.

PAGINATION/DATE 1976; 12p

ISSUE U7708

NTIS PRICES NTIS Prices: PC A02/MF A01

AVAILABILITY Translation of a Russian report.

NOTES IAEA meeting on LMFBR fuel reprocessing, Leningrad, Union of Soviet Socialist Republics (USSR), 17 May 1976.

REPORT NOS. CONF-760576-9

CATEGORY CODES 18J; 77I

INDEX TERMS *Fast reactors; *Spent fuels; After-heat; Cooling; Decontamination; Fission products; Isotope ratio; Radioactivity; Reprocessing

SUPPLEMENTARY TERMS ERDA/050800; Translations; USSR; NTISERDAT

ABSTRACT This report describes the fuel characteristics of fast power reactors and analyzes the calculated isotopic composition of spent fuel and the activity of fission products as a function of cooling time. The radiation conditions during the preparation of fuel elements from reprocessed material and the requirements for removal of the fission products from the fuel are discussed. (ERA citation 02:009219)

ACCESSION NUMBER	BNWL-2033
TITLE	Ecological Aspects of Decommissioning and Decontamination of Facilities on the Hanford Reservation
AUTHORS	Rickard, W. H.; Klepper, E. L.
ORGANIZATIONAL SOURCE	Battelle Pacific Northwest Labs., Richland, Wash. Energy Research and Development Administration.
PAGINATION/DATE	Jun 76; 67p
ISSUE	U7708
NTIS PRICES	NTIS Prices: PC A04/MF A01
CONTRACT/GRANT NOS.	E(45-1)-1830
CATEGORY CODES	6F; 57H; 68F
INDEX TERMS	*Aquatic ecosystems; *Cesium 137; *Hapo; *Iodine 131; *Plutonium 239; *Soils; *Strontium 90; *Surface waters; *Terrestrial ecosystems; Birds; Decommissioning; Decontamination; Environment; Food chains; Land use; Liquid wastes; Plants; Radioactive waste management; Radioactivity; Radioecological concentration; Radionuclide kinetics; Radionuclide migration; Solid wastes; Wild animals
SUPPLEMENTARY TERMS	ERDA/510302; ERDA/520302; ERDA/510500; ERDA/520500; NTISERDA

ABSTRACT

The Hanford environment and biota are described in relation to decommissioning of obsolescent facilities contaminated with low-levels of radioactive materials. The aridity at Hanford limits both the productivity and diversity of biota. Both productivity and diversity are increased when water is added, as for example on the margins of ponds. Certain plants, especially Salsola kali (Russian thistle or tumbleweed), are avid accumulators of minerals and will accumulate radioactive materials if their roots come into contact with contaminated soils. Data on concentration ratios (pCi per gDW of plant/pCi per gDW soil) are given for several native plants for long-lived radionuclides. Plants are generally more resistant than animals to ionizing radiation so that impacts of high-level radiation sources would be expected to occur primarily in the animals. Mammals and birds are discussed along with information on where they are to be found on the Reservation and what role they may play in the long-term management of radioactive wastes. Food habits of animals are discussed and plants which are palatable to common herbivores are listed. Food chains leading to man are shown to be very limited, including a soil-plant-mule

deer-man path for terrestrial sites and a pond-waterfowl-man pathway for pond sites. Retention basins are discussed as an example of how an ecologically sound decommissioningprogram might be planned. Finally, burial of large volumes of low-level wastes can probably be done if barriers to biological invasion are provided. (ERA citation 02:011173)

ACCESSION NUMBER BNWL-2029
TITLE Nuclear Waste Management and Transportation Quarterly Progress Report, January--March 1976
AUTHORS Platt, A. M.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.*Energy Research and Development Administration.
PAGINATION/DATE Jun 76; 62p
ISSUE U7708
NTIS PRICES NTIS Prices: PC A04/MF A01
CONTRACT/GRANT NOS. E(45-1)-1830
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS *Battelle pacific northwest laboratories; *Radioactive waste management; *Radioactive wastes; Casks; Decontamination; Economics; Fuel cycle; Geologic deposits; Radioactive waste processing; Radionuclide migration; Research programs; Safety; Trains; Tritium; Waste transportation
SUPPLEMENTARY TERMS ERDA/052000; ERDA/050900; ERDA/052001; NTISERDA
ABSTRACT Progress is reported in the following areas: Alternative waste management systems; decontamination and densification of chop-leach cladding residues; tritium separation and fixation; disposition of retired contaminated facilities at Hanford; transportation safety studies; transport problems, 1976-2000; safety and economic study of special trains; and development of high-level waste shipping cask models. (ERA citation 02:009240)

ACCESSION NUMBER PB-262 109/2SL
TITLE Radiation Safety Handbook for Ionizing and Nonionizing Radiation
AUTHORS Kincaid, Caleb B.
ORGANIZATIONAL SOURCE Bureau of Radiological Health, Rockville, Md.
PAGINATION/DATE Oct 76; 70p
ISSUE U7707
NTIS PRICES NTIS Prices: PC A04/MF A01

REPORT NOS. BDA/BRH-77/15
CONTRACT/GRANT NOS. FDA-77-8007
CATEGORY CODES 6R; 6J; 18F; 57V*; 57U; 77F
INDEX TERMS *Health physics; *Safety engineering; *Radiation protection; *Handbooks; Radiation hazards; Ionizing radiation; Industrial medicine; Exposure; Contamination; Licenses; Waste disposal; Radioactive materials; Hazardous materials; Materials handling; Decontamination; Warning systems; Equipment; Standards; Policies
SUPPLEMENTARY TERMS *Occupational safety and health; Nonionizing radiation; NTISFDABRH
ABSTRACT The Handbook is directed primarily to users of radiation sources throughout the Food and Drug Administration. Specific precautions regarding the possession and use of radiation sources in meeting the Agency's objectives are an inherent responsibility of all employees. In addition, the increased emphasis on occupational safety and health and the responsibilities placed on the Department by Public Law and Executive Order make it mandatory that all organizational levels and activities conform to the intent of this Handbook. The policies and procedures described in this document apply to all Agency operators and activities and are intended to protect employees and the general public.

ACCESSION NUMBER ORNL/TM-5457
TITLE Computer Model for the KALC Process Studies in the ORGDP off-Gas Decontamination Pilot Plant
AUTHORS Glass, R. W.; Barker, R. E.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.*Energy Research and Development Administration.
PAGINATION/DATE Sep 76; 49p
ISSUE U7706
NTIS PRICES NTIS Prices: PC A03/MF A01
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 18G; 77G; 63F
INDEX TERMS *Krypton; *Radioactive waste processing; Adsorption; Carbon dioxide; Computer codes; Gaseous wastes; Htgr type reactors; Krypton 85; Off-gas systems; Pilot plants
SUPPLEMENTARY TERMS ERDA/052001; ERDA/050800; NTISERDA
ABSTRACT A computer model of the KALC process is presented for the equipment configuration in use during HTGR off-gas studies at the ORGDP Off-Gas Decontamination Pilot Plant. The model is tailored to require input routinely

available during such experimental studies. A program is included to provide McCabe-Thiele plots as an additional convenience. (ERA citation 02:004589)

ACCESSION NUMBER ORNL-MIT-152
TITLE Characterization of Decontamination Factors for Evaporators Used in the Treatment of Low and Intermediate Level Liquid Radioactive Wastes
AUTHORS Rood, L. B.; Law, C. G. Jr
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.*Energy Research and Development Administration.
PAGINATION/DATE 26 Sep 72; 31p
ISSUE U7705
NTIS PRICES NTIS Prices: PC A03/MF A01
CONTRACT/GRANT NOS. W-7405-ENG-26
CATEGORY CODES 18G; 77G
INDEX TERMS *Evaporators; Decontamination; Evaporation; Liquid wastes; Ph value; Radioactive waste processing
SUPPLEMENTARY TERMS ERDA/052001; ERDA/400702; NTISERDA
ABSTRACT Evaporator decontamination factors were studied as functions of boiloff rate, volume reduction, and feed pH. A bench-scale vertical tube evaporator operating on simulated intermediate level nuclear wastes was used. Decontamination factors were not found to be strong functions of volume reduction or boiloff below vapor velocities of 25 lb/ft exp 2 -hr. At higher vapor fluxes, splashing was encountered. Foaming occurred at a feed pH of 6 but not at higher values. The presence of radioisotopes in the feed had no effect on evaporator performance. (ERA citation 02:002502)

ACCESSION NUMBER M M-2337
TITLE Tritium Waste Control Project Progress Report, October--December 1975
AUTHORS Bixel, J. C.; Kershner, C. J.
ORGANIZATIONAL SOURCE Mound Lab., Miamisburg, Ohio.*Energy Research and Development Administration.
PAGINATION/DATE 30 Jul 76; 20p
ISSUE U7704
NTIS PRICES NTIS Prices: PC A02/MF A01
CONTRACT/GRANT NOS. E-33-1-GEN-53
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS *Tritium; Containers; Decontamination; Infrared spectra; Liquid wastes; Radioactive waste processing; Research programs;

Separation processes; Transport; Tritium compounds

SUPPLEMENTARY TERMS ERDA/052001; NTISERDA

ABSTRACT In the tritiated liquid waste decontamination by molecular excitation studies, further calculations were performed on the hydrogen atom-water exchange reactions. Assembly and testing of the cell to be used for the measurement of the HTO IR spectrum were completed. As a result of findings from trial loadings using HD as a surrogate for HT in the oxidation system, it is believed that larger quantities of HTO will be required to obtain the desired ir spectrum. This appears to be a result of a significant adsorption of the water on the inner surface of the spectrometer cell. In the catalytic exchange detritiation studies, leak checking and cold operational testing of the experimental apparatus were completed. Modifications were made to improve the operability and reliability of the system as originally designed by Engelhard Minerals and Chemicals Corp. A computer program was prepared for the calculation of twelve hydrogen isotopic compounds in thermodynamic equilibrium. This program based on the free energy minimization technique produced data on the equilibrium concentrations of tritium compounds from reactants with various T/D/H/O ratios (e.g., T/H = approximately 10 exp -8 to approximately 10 exp -2) at temperatures ranging from 300 to 800 exp 0 K. The bourdon tube pressure gage on the prototype shipping container has been replaced with a 316 stainless steel pressure transducer to decrease the mechanical vulnerability of the package. Procedures have been established for usage and safety testing the primary container and a safety analysis review for the complete assembly in the AL-M1 outer shipping container has been initiated. (ERA citation 02:000297)

ACCESSION NUMBER JAPFNR-223

TITLE Development on the Equipment for Contaminated Sodium Disposal (II)

AUTHORS Tomioka, Y.; Nakajima, N.; Saigusa, M.; Ohsawa, Y.

ORGANIZATIONAL SOURCE Power Reactor and Nuclear Fuel Development Corp., Tokyo (Japan). Mitsubishi Atomic Power Industries, Inc., Tokyo (Japan).

PAGINATION/DATE 20 Mar 76; 45p

ISSUE U7704
NTIS PRICES NTIS Prices: PC A03/MF A01
AVAILABILITY U.S. Sales Only. In Japanese.
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS *Lmfbr type reactors; *Radioactive waste processing; Decontamination; Gaseous wastes; Iodine 131; Removal; Sodium
SUPPLEMENTARY TERMS ERDA/220502; ERDA/210500; Japan; NTISERDAE
ABSTRACT The transport behavior of trace amounts of radionuclides such as exp 131 I and exp 137 Cs in sodium has been studied under conditions of sodium-steam reaction and sodium burning caused by excess steam. The trapping of these radionuclides transported into gas phase in a gas bubbler or scrubber, which is a component of waste gas treatment system, is also discussed. The main experimental results are presented. (ERA citation 02:000728)

ACCESSION NUMBER CONF-760806-7
TITLE Process Behavior and Environmental Assessment of exp 14 C Releases from an HTGR Fuel Reprocessing Facility
AUTHORS Snider, J. W.; Kaye, S. V.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.*Energy Research and Development Administration.
PAGINATION/DATE 1976; 48p
ISSUE U7704
NTIS PRICES NTIS Prices: PC A03/MF A01
NOTES Meeting on controlling airborne effluents from fuel cycle plants, Sun Valley, Idaho, United States of America (USA), 5 Aug 1976.
CATEGORY CODES 18H; 77G; 68F; 771
INDEX TERMS *Carbon 14; *Fuel reprocessing plants; *Radioactive wastes; Combustion; Contamination; Decontamination; Design; Environmental effects; Fuel elements; Graphite; Htgr type reactors; Radiometric analysis; Waste processing
SUPPLEMENTARY TERMS ERDA/500300; ERDA/053000; *Air pollution; NTISERDA
ABSTRACT Large quantities of exp 14 CO sub 2 will be evolved when graphite fuel blocks are burned during reprocessing of spent fuel from HTGR reactors. The possible release of some or all of this exp 14 C to the environment is a matter of concern which is investigated in this paper. Various alternatives are considered in this study for decontaminating and releasing the process off-gas to the environment. Concomitant radiological analyses have been done for the waste process

scenarios to supply the necessary feedbacks for process design. (ERA citation 02:001489)

ACCESSION NUMBER BNWL-tr-196
TITLE Progress in the Techniques of Bituminizing Liquid Effluents of Pressurized-Water Nuclear Power Plants
AUTHORS Lefillatre, G.
PAGINATION/DATE 1976; 20p
ISSUE U7704
NTIS PRICES NTIS Prices: PC A02/MF A01
AVAILABILITY Translation of SM--207/29.
NOTES IAEA symposium on the management of radioactive waste, Vienna, Austria, 22 Mar 1976.
REPORT NOS. CONF-760310-13
CATEGORY CODES 18G; 77C; 68F
INDEX TERMS *Radioactive waste processing; Bituminous materials; Decontamination; Density; Economics; Efficiency; Leaching; Liquid wastes; Pwr type reactors; Solidification; Stability; Temperature effects
SUPPLEMENTARY TERMS ERDA/052001; Translations; France; NTISERDAT
ABSTRACT The report concerns recent advances in the technique of direct bituminization, without preconcentration, of spent effluents from a light-water nuclear power plant of the PWR type. Direct bituminization consists in complete dehydration in a thin-film vertical evaporator of the dilute emulsion formed by the mixture of bituminous emulsion and effluents at pH 9.6. The bituminous coating containing 40 to 50 percent salts and at least 1 percent water flows by gravity into a drum where it solidifies. Decontamination of the distillates is perfected by passage through columns of active carbon and ion-exchange resins. The process was developed in the pilot plant of the Cadarache Center, which is equipped with a LUWA L150 evaporator with which 60 liters per hour of effluents of activity around 1 Ci/m exp 3 can be treated. The decontamination factors of the devices are between 10 exp 3 and 10 exp 5, and the real concentration factor attains 290 with effluents having a concentration of 2 g/l. The properties of the solidified waste are mentioned: density, bitumen content, softening point, leaching rate and thermal stability. Finally, on the basis of an industrial direct bituminization plant with a capacity of 3 m exp 3 per hour, the annual cost of treating the spent effluents of two

900-MWe PWR nuclear power plants is estimated to be one and one half million francs. Comparison of the number of barrels packed by bitumen and cement reveals a volume gain of 2.7 in favor of bitumen for the solidified wastes to be stored. (ERA citation 02:000302)

ACCESSION NUMBER NLCO-1132
TITLE Feasibility Study of a Portable Smelter for Scrap Metals
AUTHORS Cavendish, J. H.
ORGANIZATIONAL SOURCE National Lead Co. of Ohio, Cincinnati.*Energy Research and Development Administration.
PAGINATION/DATE Jun 76; 97p
ISSUE U7703
NTIS PRICES NTIS Prices: PC A05/MF A01
CONTRACT/GRANT NOS. E(30-1)-1156
CATEGORY CODES 18G; 11F; 77G; 71N
INDEX TERMS *Gaseous diffusion plants; *Radioactive waste processing; Decontamination; Economics; Feasibility studies; Legal aspects; Metals; Safety; Smelting; Uranium
SUPPLEMENTARY TERMS ERDA/052001; ERDA/050501; Metal scrap; Smelters; Portable equipment; Radioactive contaminants; NTISERDA

ABSTRACT
The use of a portable smelter to process uranium-contaminated scrap metals was studied. Objectives were to convert scrap metal located at many diverse sites into a form which would be suitable for unlicensed sale and reduce the problems associated with storing the scrap. The Foundry Design Company study indicated the portable smelter concept was feasible from an equipment and transportation standpoint. Capital costs for a 5-ton/hour (steel) nominal capacity unit were estimated to be $2,349,000. Technical evaluation indicates that all the common metals considered, i.e., iron, nickel, copper, and aluminum, are amenable to uranium decontamination by smelting except aluminum. An economic evaluation of the processing of the 30,000 tons of steel scrap to be generated by the Cascade Improvement Program by a portable smelter was made based upon information supplied by Foundry Design Company, plus the assumption that the product metal could be sold for $120.00 per ton. This evaluation indicated a net return of $2,424,000 to the government could be realized. The Health and Safety study indicated no major problems of this nature would be encountered in operating a portable

smelter. The legal review indicated the proposed operation fell within the authority of existing regulations. Consideration of possible conflicts with regard to competition with the private sector was suggested. (ERA citation 01:025479)

ACCESSION NUMBER	UNI-SA-26
TITLE	United Nuclear Industries, Inc. Practical Application of ALARA (ALAP) Philosophy
AUTHORS	Hall, T. M.
ORGANIZATIONAL SOURCE	United Nuclear Industries, Inc., Richland, Wash. Energy Research and Development Administration.
PAGINATION/DATE	28 Apr 76; 42p
ISSUE	U7702
NTIS PRICES	NTIS Prices: PC A03/MF A01
NOTES	The remote systems technology division of the American Nuclear Society winter meeting, Washington, District of Columbia, United States of America (USA), Nov 1976.
REPORT NOS.	CONF-761101-1
CONTRACT/GRANT NOS.	AT(45-1)-1857
CATEGORY CODES	18J; 77I
INDEX TERMS	*N-reactor; Decontamination; Primary coolant circuits; Radiation doses; Radiation protection; Radioactive effluents
SUPPLEMENTARY TERMS	ERDA/220700; NTISERDA

ABSTRACT

The N Reactor is the only dual-purpose reactor in the USA. It is owned by ERDA and is currently operated by United Nuclear Industries, Inc. The plant began operation in 1964. Monitoring of the primary coolant piping radiation levels indicated a build-up that was not linear with time. It was forming at an accelerating rate, and it was apparent that radiation exposure was going to be a significant factor in N Plant operation. By 1967, connector piping radiation level was 1 rem/hr. A radiation exposure reduction task force was chartered in 1967 to develop and carry out an exposure reduction plan. A decontamination task force was also chartered to determine how to chemically clean out the primary piping to reduce radiation levels. In October 1967, the first reactor piping decontamination was performed, and connector radiation levels were reduced from 1 rem/hr to 20 mrem/hr. The task forces also attacked other radiation exposure problems with success. In 1974, an exposure reduction program manager position was created to carry on the work of the task force efforts. Out of

this came the current effort for ALARA. By necessity, N Plant operation has been applying the principles of ALARA (ALAP) since 1967. The methods have improved with time, new techniques have been put to use, and others discarded. The purpose of this paper is to describe how UNI has made practical the application of the ALARA (ALAP) principles. (ERA citation 01:023356)

ACCESSION NUMBER MLM-2239
TITLE Report on the Decontamination and Decommissioning of the Technical (T) Building at Mound Laboratory
AUTHORS Gilbert, K. V.; Wright, E. M.; Madding, R. D.
ORGANIZATIONAL SOURCE Mound Lab., Miamisburg, Ohio.*Energy Research and Development Administration.
PAGINATION/DATE 21 May 76; 24p
ISSUE U7701
NTIS PRICES NTIS Prices: PC A02/MF A01
CONTRACT/GRANT NOS. E-33-1-GEN-53
CATEGORY CODES 18G; 77G
INDEX TERMS *Nuclear facilities; Decommissioning; Decontamination; Gloveboxes; Hot cells; Polonium 210; Recommendations; Separation processes
SUPPLEMENTARY TERMS ERDA/400702; NTISERDA
ABSTRACT The T Building was used for separation and purification of exp 210 Po. General and special termination procedures and equipment used in its decontamination and decommissioning are described. Recommendations are given for improvements of equipment for easier decontamination in the future. (ERA citation 01:020278)

ACCESSION NUMBER ERDA-tr-142
TITLE Annual Report, 1973
AUTHORS Krause, H.; Rudolph, G.
ORGANIZATIONAL SOURCE Kernforschungszentrum Karlsruhe (F.R. Germany).*Energy Research and Development Administration.
PAGINATION/DATE 109p
ISSUE U7701
NTIS PRICES NTIS Prices: PC A06/MF A01
AVAILABILITY Translation of KFK--2126.
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS *Decontamination; *Molten salts; *Plutonium; *Radioactive waste processing; *Radioactive waste storage; *Reactor cooling systems; *Sodium; *Soils; Bitumens; Diffusion; Fission

	products; Glass; Leaching; Radionuclide migration; Removal; Solidification; Thermite process; Waste processing
SUPPLEMENTARY TERMS	ERDA/052001; ERDA/052002; ERDA/510301; Translations; West Germany; NTISERDAT
ABSTRACT	Research is reported on fixation of radioactive waste (RAW) in bitumen, in glass, and through Thermite reaction; decontamination of waste water, hydrocarbons, sodium, molten salts, and reactor loops; Pu transport in soil; ultimate storage of RAW; and waste storage and transport at Karlsruhe. Laboratory, project, decontamination, and operation group activities are reported. (ERA citation 01:018755)

ACCESSION NUMBER	AI-ERDA-13158
TITLE	Building 003 Decontamination and Disposition. Final Report
AUTHORS	Ureda, B. F.
ORGANIZATIONAL SOURCE	Atomics International Div., Canoga Park, Calif.*Energy Research and Development Administration.
PAGINATION/DATE	25 Feb 76; 40p
ISSUE	U7701
NTIS PRICES	NTIS Prices: PC A03/MF A01
CONTRACT/GRANT NOS.	AT(04-3)-701
CATEGORY CODES	18G; 77G
INDEX TERMS	*Nuclear facilities; Decontamination; Liquid wastes; Radiation monitoring; Radioactive wastes
SUPPLEMENTARY TERMS	ERDA/400702; NTISERDA
ABSTRACT	The decontamination and disposition (D and D) of the contaminated facilities in Building 003 are complete. The Hot Cave, the building radioactive exhaust system, the radioactive liquid waste system, and the fume hoods were removed. The more significant D and D activities are summarized, special techniques are noted, and problems and their resolution are discussed. Results of the radiological monitoring are presented. (ERA citation 01:020275)

ACCESSION NUMBER ERDA-76-43(V.2)
TITLE Alternatives for Managing Wastes from Reactors and Post-Fission Operations in the LWR Fuel Cycle. Volume 2. Alternatives for Waste Treatment
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.*Energy Research and Development Administration.
PAGINATION/DATE May 76; 517p
ISSUE U7626
NTIS PRICES NTIS Prices: PC$12.75/MF$3.00
CONTRACT/GRANT NOS. E(45-1)-1830
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS *Radioactive waste processing; Bwr type reactors; Decontamination; Fuel cycle; Gaseous wastes; Liquid wastes; Nuclear fuels; Pwr type reactors; Reactor decommissioning; Solid wastes; Solidification; Transuranium elements; Vitrification
SUPPLEMENTARY TERMS ERDA/052001; NTISERDA
ABSTRACT Volume II of the five-volume report is devoted to the description of alternatives for waste treatment. The discussion is presented under the following section titles: fuel reprocessing modifications; high-level liquid waste solidification; treatment and immobilization of chop-leach fuel bundle residues; treatment of noncombustible solid wastes; treatment of combustible wastes; treatment of non-high-level liquid wastes; recovery of transuranics from non-high-level wastes; immobilization of miscellaneous non-high-level wastes; volatile radioisotope recovery and off-gas treatment; immobilization of volatile radioisotopes; retired facilities (decontamination and decommissioning); and, modification and use of selected fuel reprocessing wastes. (ERA citation 01:018742)

ACCESSION NUMBER BNWL-1978
TITLE Nuclear Waste Management and Transportation Quarterly Progress Report, October--December 1975
AUTHORS Platt, A. M.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.*Energy Research and Development Administration.
PAGINATION/DATE Mar 76; 67p
ISSUE U7626
NTIS PRICES NTIS Prices: PC$4.50/MF$3.00
CONTRACT/GRANT NOS. E(45-1)-1830

CATEGORY CODES 18G; 77G; 68F
INDEX TERMS *Radioactive waste management; *Radioactive wastes; Casks; Combustion; Decontamination; Economics; Equipment; Pyrolysis; Research programs; Safety; Separation processes; Solidification; Spent fuels; Trains; Transport; Tritium; Waste transportation
SUPPLEMENTARY TERMS ERDA/052000; ERDA/052001; NTISERDA
ABSTRACT Research is reported on advanced methods for waste management and disposal, decontamination and densification of chop-leach cladding residues, pyrolysis-incineration of combustible alpha wastes, tritium separation and fixation, disposition of retired contaminated facilities at Hanford, transportation safety studies, safety and economics of special trains, and high-level waste shipping cask models. (ERA citation 01:018721)

ACCESSION NUMBER BNWL-SA-5696
TITLE Chemical Decontamination and Melt Densification
AUTHORS Dillon, R. L.; Griggs, B.; Kemper, R. S.; Nelson, R. G.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.-Energy Research and Development Administration.
PAGINATION/DATE 1976; 17p.
ISSUE U7626
NTIS PRICES NTIS Prices: PC$3.50/MF$3.00
NOTES IAEA symposium on the management of radioactive waste, Vienna, Austria, 22 Mar 1976.
REPORT NOS. CONF-760310-5
CONTRACT/GRANT NOS. E(45-1)-1830
CATEGORY CODES 18G; 18J; 77G; 77I
INDEX TERMS *Inconel alloys; *Spent fuel elements; *Stainless steels; *Zircaloy; Decontamination; Fuel cans; Melting; Radioactive waste storage; Reprocessing; Tritium
SUPPLEMENTARY TERMS ERDA/052001; ERDA/050800; NTISERDA
ABSTRACT Preliminary studies on the chemical decontamination and densification of Zircaloy, stainless steel, and Inconel undissolved residues remaining after dissolution of the UO sub 2 --PuO sub 2 spent fuel material from sheared fuel bundles are reported. The studies were made on cold or very small samples to demonstrate the feasibility of the processes developed before proceeding to hot cell demonstrations with kg

level of the sources. A promising aqueous decontamination method for Zr alloy cladding was developed in which oxidized surfaces are conditioned with HF prior to leaching with ammonium oxalate, ammonium citrate, ammonium fluoride, and hydrogen peroxide. Feasibility of molten salt decontamination of oxidized Zircaloy was demonstrated. A low melting alloy of Zircaloy, stainless steel, and Inconel was obtained in induction heated graphite crucibles. Segregated Zircaloy cladding sections were directly melted by the inductoslag process to yield a metal ingot suitable for storage. Both Zircaloy and Zircaloy--stainless steel--Inconel alloys proved to be highly satisfactory getters and sinks for recovered tritium. (ERA citation 01:018738)

ACCESSION NUMBER	P"E-R-67
TITLE	Project Rulison. Well Plugging and Site Abandonment Plan
ORGANIZATIONAL SOURCE	Energy Research and Development Administration. Las Vegas. Nev. Nevada Operations Office.*Austral Oil Co., Inc., Houston. Tex.
PAGINATION/DATE	May 76; 50p
ISSUE	U7622
NTIS PRICES	NTIS Prices: PCS4.00/MFS3.00
REPORT NOS.	NVO-174
CATEGORY CODES	18C; 77D
INDEX TERMS	*Natural gas; *Natural gas wells; *Rulison event; Decommissioning; Decontamination; Explosive stimulation; Nuclear explosions; Underground explosions
SUPPLEMENTARY TERMS	ERDA/450201; ERDA/030900; NTISERDA
ABSTRACT	Project Rulison involved the use of a nuclear explosive to stimulate natural gas recovery from a deposit in Colorado. The 43 kT explosive was detonated at a depth of 8426 ft on Sept. 10. 1969. A re-entry well was drilled in July 70 and production testing occurred during Oct. 70 to April 71 at which time the well was shut-in. There are no further plans for using the well. Plans for the well plugging, radiological sampling decontamination procedures and site abandonment, including equipment removal, are described. (ERA citation 01:017197)

ACCESSION NUMBER	MLM-2288
TITLE	Tritium Effluent Control Project Progress Report, July--September 1975
AUTHORS	Kershner, C. J.; Bixel, J. C.
ORGANIZATIONAL SOURCE	Mound Lab., Miamisburg, Ohio.*Energy Research and Development Administration.
PAGINATION/DATE	19 Mar 76; 30p
ISSUE	U7622
NTIS PRICES	NTIS Prices: PCS4.00/MFS3.00
CONTRACT/GRANT NOS.	E-33-1-GEN-53
CATEGORY CODES	18G; 77G
INDEX TERMS	*Radioactive waste processing; *Tritium; Decontamination; Electrolysis; Heavy water; Isotopic exchange; Liquid wastes; Radioactive wastes; Research programs; Tritium compounds
SUPPLEMENTARY TERMS	ERDA/052001; ERDA/052002; Laser enhanced reactions; NTISERDA

ABSTRACT

In the Tritiated Liquid Waste Decontamination (Molecular Excitation) program, it was found that a 1/4'' Nd:YAG amplifier and a Faraday rotator isolator must be added to the oscillator to obtain the required power for the laser excitation experiments. The isotopic selectivity of the two-photon dissociation process was examined in more detail. The selectivity or ratio of HTO to H sub 2 O molecules that are photodissociated was found to be on the order of 25, which is inadequate for application to large-scale detritiation projects, e.g., nuclear fuel reprocessing plant waste. The selectivity is such that most of the laser energy is wasted in photodissociation of H sub 2 O. This obstacle may be overcome by pumping more vibrational energy into the HTO molecules. Various schemes towards this end are being considered. Extensive ab initio calculations on the potential surface for the hydrogen atom-water exchange reaction have been carried out. The energy barrier is calculated to be 38 1/2 kcal/mole, which implies that the exchange reaction T + H sub 2 O implies HTO + H is at least 10 exp 9 times slower than the exchange reaction T + H sub 2 implies HT + H. Calculations were also performed on the analogous hydrogen atom-hydrogen fluoride exchange reaction. In lieu of other disposal methods a system using a General Electric UCT-1 regenerative cell has been assembled and tested. This system should be capable of decomposing pure water into hydrogen and oxygen gases. The tritium from this process can be purified and reused instead of buried. A preliminary economic

evaluation was made of the HT/H sub 2 O catalytic exchange detritiation stripping process as it might apply to a 5 metric ton/day nuclear fuel reprocessing plant. A tritiated water shipping container has been designed and developed for use with the ERDA--DOT approved AL--MI secondary container. (ERA citation 01:012602)

ACCESSION NUMBER BNWL-B-479
TITLE Detailed Plan for the Decontamination and Restoration of the 231-Z Facility
AUTHORS King, R. R.; Asmund, V. C.; Butts, H. L.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.*Energy Research and Development Administration.
PAGINATION/DATE 1976; 102p
ISSUE U7622
NTIS PRICES NTIS Prices: PC$5.50/MF$3.00
CONTRACT/GRANT NOS. E(45-1)-1830
CATEGORY CODES 14B; 77G
INDEX TERMS *Nuclear facilities; Cost; Decontamination; Gloveboxes; Nuclear materials management; Radiation protection; Ventilation
SUPPLEMENTARY TERMS ERDA/400702; ERDA/052000; NTISERDA
ABSTRACT The detailed plan, special considerations, and time schedule and cost estimate are given for the decontamination and restoration of the 231-Z facility for use as a nonplutonium ERDA laboratory. (ERA citation 01:013848)

ACCESSION NUMBER ZAED-BIBL.-02-17
TITLE Bibliographies in Nuclear Science and Technology. Section 02: Contamination and Decontamination of Foods. Number 17
AUTHORS Fischer, E.
ORGANIZATIONAL SOURCE Zentralstelle fuer Atomkernenergie-Dokumentation, Leopoldshafen (F.R. Germany).
PAGINATION/DATE Nov 75; 41p
ISSUE N3312
NTIS PRICES NTIS Prices: PC$4.00/MF$2.25
AVAILABILITY In several languages. U.S. Sales Only.
CATEGORY CODES 8H; 68F; 57H
INDEX TERMS (*Food; *Contamination); (*Decontamination; *Bibliographies); Diffusion; Fallout deposits; Food chains; Radioactive effluents; Radionuclide kinetics
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 33 12, number 29150.

ACCESSION NUMBER SRO-TWM-75-1
TITLE Plan for the Management of Radioactive Waste, Savannah River Plant
ORGANIZATIONAL SOURCE Energy Research and Development Administration, Aiken, S.C. Savannah River Operations Office.
PAGINATION/DATE Jul 75; 71p
ISSUE N3312
NTIS PRICES NTIS Prices: PCS4.50/MFS2.25
CATEGORY CODES 18G; 68F; 77G
INDEX TERMS (*Savannah river plant; *Radioactive waste management); Decommissioning; Decontamination; Liquid wastes; Radioactive waste processing; Radioactive waste storage; Radioactive wastes
SUPPLEMENTARY TERMS Solid waste disposal; NTISERDA
ABSTRACT The following areas are covered in the Savannah River Plant's radioactive waste management plan: program administration; description of waste generating processes; waste management facilities; radioactive wastes stored; plans and budget projections; and description of decontamination and decommissioning .

ACCESSION NUMBER ORNL/TM-5095
TITLE Krypton Absorption in Liquid CO sub 2 (Kalc): Campaign II in the Experimental Engineering Section off-Gas Decontamination Facility
AUTHORS Glass, R. W.; Beaujean, H. W. R.; Fowler, V. L.; Gilliam, T. M.; Inman, D. J.
ORGANIZATIONAL SOURCE Oak Ridge National Lab.; Tenn.
PAGINATION/DATE Feb 76; 55p
ISSUE N3312
NTIS PRICES NTIS Prices: PCS4.50/MFS2.25
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 18G; 77G
INDEX TERMS (*Krypton; *Adsorption); (*Radioactive waste processing; *Gaseous wastes); Carbon dioxide; Decontamination; Htgr type reactors; Liquids; Off-gas systems; Oxygen; Removal; Research programs
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Results are presented for the second major campaign for quantifying krypton removal from simulated High-Temperature Gas-Cooled Reactor reprocessing off-gas by the KALC process. The Experimental Engineering Section Off-Gas Decontamination Facility used in the campaign provides engineering-scale experiments with nominal gas and liquid flows of 5 scfm and 0.5 gpm respectively. Equilibrium and

nonequilibrium mass transfer experiments for the CO sub 2 --O sub 2 --Kr system are described, and a detailed discussion of the data analysis is included. The analysis, although not rigorous, is reasonable and indicates values of HTU for krypton on the order of 0.4 ft for decontamination factors from 100 to 10,000. Recent flooding information for the packed columns is combined with previous data and is shown to be well represented by an empirical flooding equation.

ACCESSION NUMBER ORNL/TM-5049
TITLE Assessment of the Radiological Impact of exp 232 U and Daughters in Recycled exp 233 U Htgr Fuel
AUTHORS Till, J. E.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE Feb 76; 45p
ISSUE N3310
NTIS PRICES NTIS Prices: PC$4.00/MF$2.25
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 18J; 77I
INDEX TERMS (*Man; *Radiation hazards); (*Fuel reprocessing plants; Radiation hazards); (*Lungs; *Radiation doses); (*Skeleton; Radiation doses); Alpha sources; Decay; Decontamination; Htgr type reactors; Radioactive effluents; Radon 220; Uranium 232
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT

This paper provides an evaluation of the potential radiation exposures to man resulting from the operational releases of exp 232 U and daughters from a hypothetical HTGR fuel reprocessing plant. These estimated exposures are compared to those from the other radionuclides which could comprise the airborne releases from an HTGR fuel reprocessing plant. A hypothetical source term involving both particulate and volatile releases from an HTGR fuel reprocessing plant (450 metric tons of heavy metal annual capacity) is given assuming radionuclide inventories and decontamination factors from the literature. Radionuclides in the source term are ranked according to the magnitude of dose to total body, bone, and lungs for individuals at a distance of 1.5 miles from the stack. Although exp 232 U and daughters account for only 0.1 percent of the total particulate activity, the total-body dose from these radionuclides is greater in

magnitude than the dose from all other radionuclides except exp 134 Cs, exp 137 Cs, and exp 90 Sr. Uranium-232 and daughters account for approximately 4 percent of the dose to each organ due to particulates. HTGR uranium fuel and LMFBR plutonium fuel are significantly more radiotoxic (dose commitment to bone) than LWR uranium fuel, and the LMFBR fuel is approximately 500 times more radiotoxic than HTGR fuel for inhalation of equivalent masses of each fuel soon after release to the atmosphere. The dose commitment to bone from HTGR fuel may increase by a factor of approximately 7.5 due to buildup of exp 232 U daughters.

ACCESSION NUMBER FRNC-CONF-129
TITLE Dtpa Therapy of Lung Contaminations: Testing a Self Contained Aerosol Generator
AUTHORS Ducousso, R.; Pasquier, C.
ORGANIZATIONAL SOURCE CEA Centre d'Etudes Nucleaires de Fontenay-aux-Roses, 92 (France).
PAGINATION/DATE 1975; 3p
ISSUE N3310
NTIS PRICES NTIS Prices: PC$3.50/MF$2.25
AVAILABILITY U.S. Sales Only.
REPORT NOS. CONF-750518-8
CATEGORY CODES 06E; 06R; 57E; 57V
INDEX TERMS (*Radioactive aerosols; *Inhalation); (*Personnel; *Decontamination); (*Lungs; Decontamination); DTPA; First aid; Radiation protection; Radionuclide kinetics; Therapy
SUPPLEMENTARY TERMS France; NTISERDA
ABSTRACT For abstract, see NSA 33 10, number 23583.

ACCESSION NUMBER BNWL-1952
TITLE Nuclear Waste Management and Transportation Quarterly Progress Report, July--September 1975
AUTHORS Platt, A. M.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE Nov 75; 51p
ISSUE N3310
NTIS PRICES NTIS Prices: PC$4.50/MF$2.25
CONTRACT/GRANT NOS. E(45-1)-1830
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS (*Radioactive waste management; *Research programs); (*Radioactive waste disposal; Research programs); (*Hapo; Radioactive waste management); Decontamination; Fuel cans;

SUPPLEMENTARY TERMS: Pyrolysis; Radioactive wastes; Safety; Separation processes; Tritium; Waste transportation; NTISERDA

ABSTRACT: Progress is reported in the following areas of research: advanced methods for management and disposal of radioactive wastes; decontamination and densification of chop--leach cladding residues; pyrolysis--incineration of combustible alpha wastes; tritium separation and fixation; disposition of retired contaminated facilities at Hanford; and transportation safety studies.

ACCESSION NUMBER: BNWL-SA-5541

TITLE: Cleanup of Radon Inhalation Study Effluents

AUTHORS: Anderson, B. V.; Palmer, R. F.

ORGANIZATIONAL SOURCE: Battelle Pacific Northwest Labs., Richland, Wash.

PAGINATION/DATE: 1976; 6p

ISSUE: N3310

NTIS PRICES: NTIS Prices: PCS3.50/MFS2.25

REPORT NOS.: CONF-760202-27

CONTRACT/GRANT NOS.: E(45-1)-1830

CATEGORY CODES: 8H; 68F; 68A

INDEX TERMS: (*Radon 222; *Adsorption); (*Activated carbon; *Air cleaning); Air; Decontamination; Environment; Laboratory equipment; Radiation protection; Radioactive effluents

SUPPLEMENTARY TERMS: NTISERDA

ABSTRACT: Studies of the effects of inhalation in animals of radon and its daughter products, in progress in the Battelle-Northwest laboratory for several years, have resulted in continuous release to the environment of approximately 300 mu Ci of exp 222 Rn per minute. A recent change in the physical location of these studies to a less isolated area required development of a radon retention system capable of decontaminating 4,000 cubic meters of moist, radon-bearing air per month. Experimental data are reported on radon retention by activated carbon. The data collected were used to design a system for retention of 99 percent of the radon leaving an inhalation exposure chamber. A flow diagram, shielding considerations for the carbon beds, and operating characteristics of the proposed system are presented. A successful test of the prototype retention system indicated that 40 cubic meters of air would be decontaminated of

radon by one kilogram of PCB (6 x 10 mesh) activated carbon under experimental conditions of 0 +- 2 exp 0 C and 330 cm/min superficial velocity or 660 cm/min true velocity with 50 percent void.

ACCESSION NUMBER AI-ERDA-13156
TITLE Decontamination and Decommissioning Criteria for Use in Design of New Plutonium Facilities
AUTHORS Paschall, R. K.
ORGANIZATIONAL SOURCE Atomics International Div., Canoga Park, Calif.
PAGINATION/DATE 30 Jun 75; 127p
ISSUE N3309
NTIS PRICES NTIS Prices: PCS6.00/MFS2.25
CONTRACT/GRANT NOS. AT(04-3)-701
CATEGORY CODES 7E; 99E
INDEX TERMS (*Nuclear facilities; *Decommissioning); Decontamination; Design; Gaseous wastes; Hazards; Liquid wastes; Plutonium; Safety
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Decontamination and decommissioning (D and D) criteria were assembled for use in designing new plutonium facilities. These criteria were gathered from literature searches and visits to many plutonium facilities around the country. The recommendations of reports and experienced personnel were used. Since total D and D costs can be millions of dollars, improved designs to facilitate D and D will result in considerable savings in cost and time and will help to leave the site for unrestricted future use after D and D. Finally, better design will reduce hazards and improve safety during the D and D effort.

ACCESSION NUMBER ERDA-1538(V.1)
TITLE Final Environmental Statement, Waste Management Operations, Hanford Reservation, Richland, Washington. Volume 1
ORGANIZATIONAL SOURCE Energy Research and Development Administration, Washington, D.C.
PAGINATION/DATE Dec 75; 593p
ISSUE N3308
NTIS PRICES NTIS Prices: PCS13.75/MFS2.25
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS (*Hapo; Radioactive waste management); (*Radioactive waste management; *Environmental impact statements); Chemical effluents; Decommissioning; Decontamination; Environmental effects; Gaseous wastes; Liquid

SUPPLEMENTARY TERMS wastes: Radioactive waste disposal: Radioactive waste processing: Radioactive wastes: Solid wastes: Solidification
NTISERDA

ABSTRACT The impacts and alternatives available to the ongoing Hanford Waste Management Operations Program are presented. Environmental effects of routine operation of plant facilities are considered. Reasonable alternatives to the current program for treatment of high-level liquid radioactive waste, other radioactive liquid waste, radioactive gaseous wastes, radioactive solid waste, nonradioactive waste, and other potential environmental pollutants are given.

ACCESSION NUMBER ORNL-5109
TITLE Uranium Tailings Bibliography
AUTHORS Holoway, C. F.; Goldsmith, W. A.; Eldridge, V. M.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE Dec 75; 97p
ISSUE N3306
NTIS PRICES NTIS Prices: PC$5.00/MF$2.25
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 18J; 77I
INDEX TERMS (*Radioactive wastes; *Bibliographies); (*Human populations; *Radiation hazards); Biological radiation effects; Decontamination; Dosimetry; Etiology; Internal irradiation; Ore processing; Radioactive waste disposal; Radioisotopes; Radionuclide migration; Uranium mines

SUPPLEMENTARY TERMS NTISERDA

ABSTRACT A bibliography containing 1,212 references is presented with its focus on the general problem of reducing human exposure to the radionuclides contained in the tailings from the milling of uranium ore. The references are divided into seven broad categories: uranium tailings pile (problems and perspectives), standards and philosophy, etiology of radiation effects, internal dosimetry and metabolism, environmental transport, background sources of tailings radionuclides, and large-area decontamination.

ACCESSION NUMBER CONF-750827-
TITLE Proceedings of the Conference on Decontamination and Decommissioning (D and D) of Erda Facilities. Idaho Falls. Idaho. August 19--21. 1975
ORGANIZATIONAL SOURCE Energy Research and Development Administration. Idaho Falls. Idaho Idaho Operations Office.*Aerojet Nuclear Co., Idaho Falls. Idaho.
PAGINATION/DATE Sep 75: 521p
ISSUE N3306
NTIS PRICES NTIS Prices: PC$12.75/MF$2.25
CATEGORY CODES 7E: 99F
INDEX TERMS (*Nuclear facilities: Decommissioning): (*Decontamination: *Meetings): (*Decommissioning: Meetings)
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Twenty-nine items have been abstracted separately for Nuclear Science Abstracts and ERDA Energy Research Abstracts.

ACCESSION NUMBER DOCKET-50259-677
TITLE Browns Ferry Nuclear Power Station. Units 1. 2. and 3. Semiannual Report. January--June 1975
ORGANIZATIONAL SOURCE Tennessee Valley Authority. Chattanooga.
PAGINATION/DATE 1975: 38p
ISSUE N3305
NTIS PRICES NTIS Prices: PC$4.00/MF$2.25
REPORT NOS. DOCKET-50260-455: DOCKET-50296-230
CATEGORY CODES 18E: 77H
INDEX TERMS (*Browns ferry-1 reactor: *Fires): (*Browns ferry-2 reactor: Fires): Browns ferry-3 reactor: Cleaning: Decontamination: Environment: Monitoring: Personnel: Radiation doses: Radioactive waste management: Radiochemistry: Reactor maintenance: Reactor operation
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Browns Ferry units 1 and 2 operated at maximum power from January 1 to March 22 except as limited by thermal margins. fuel preconditioning. optimum power shape. maintenance. and Unit 2 start-up tests. On March 22 a cable tray fire started causing spurious starting of equipment due to faulted control cables. The reactors were manually scrammed and placed in cold shutdown for fire investigation. clean up. and fuel removal. Information is also presented concerning maintenance. radiochemistry. occupational radiation exposure. release of radioactive

materials, and non-radiological environmental monitoring.

ACCESSION NUMBER BNWL-SA-5514
TITLE PNL Studies of D and D at Hanford
AUTHORS Harmon, K. M.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE 1975; 20p
ISSUE N0103
NTIS PRICES NTIS Prices: PC$3.50/MF$2.25
REPORT NOS. CONF-750822-8
CONTRACT/GRANT NOS. AT(45-1)-1830
CATEGORY CODES 18I; 77H; 46F
INDEX TERMS (*Nuclear facilities; *Decommissioning); Decontamination; Economics; Hapo; Radioactive waste disposal; Radionuclide migration; Safety
SUPPLEMENTARY TERMS ERDA/400702; NTISERDA
ABSTRACT The PNL decontamination and decommissioning program at Hanford involves (1) the preparation of a long-term plan for a systematic approach to the extensive and varied programs of decommissioning retired facilities at Hanford and (2) a D and D demonstration project, the decommissioning of a grossly contaminated plutonium processing facility

ACCESSION NUMBER AECL-5227
TITLE Materials Research in AECL
ORGANIZATIONAL SOURCE Atomic Energy of Canada Ltd., Chalk River, Ontario. Chalk River Nuclear Labs.
PAGINATION/DATE 1975; 23p
ISSUE N3305
NTIS PRICES NTIS Prices: PC$3.50/MF$2.25
AVAILABILITY U.S. Sales Only.
CATEGORY CODES 11F; 18J; 71G; 71L; 77J
INDEX TERMS (*Corrosion products; *Radioactivation); (*Reactor cooling systems; *Contamination); (*Douglas point ontario reactor; Contamination); (*Cobalt 60; *Deposition); Boilers; Copper; Decontamination; Dissolution; Electrochemistry; Filters; Ion exchange materials; Mathematical models; Oxidation; Reactor materials; Research programs
SUPPLEMENTARY TERMS Radioactivity; Radiation effects; Canada; NTISERDA
ABSTRACT Research is being done on activity transport (radioactivation of corrosion products and their transport in reactor systems); surface

chemistry of metals and their oxides in hot water (Cu oxidation, DPGS surface); mathematical models for exp 60 Co deposition; materials selection for Pickering, Bruce, Gentilly, and future reactors; hot filter development (edge, graphite, and magnetic); and decontamination (Douglas Point, Can-Decan).

ACCESSION NUMBER UNI-SA-18
TITLE Decontamination and Decontaminant Waste Disposal
AUTHORS Kratzer, W. K.
ORGANIZATIONAL SOURCE United Nuclear Industries, Inc., Richland, Wash.
PAGINATION/DATE 9 Oct 75; 20p
ISSUE N3304
NTIS PRICES NTIS Prices: PC$3.50/MF$2.25
CATEGORY CODES 7E; 99E
INDEX TERMS (*Primary coolant circuits; *Decontamination); (*Radioactive waste processing; *Solidification); Cements; Dissolution; Dose rates; Fission products; Nuclear power plants; Personnel; Radioactive waste disposal; Urea
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Typical decontaminations expected at nuclear power reactors and the problems associated with the processing of decontamination wastes are described.

ACCESSION NUMBER MLM-2270
TITLE Tritium Effluent Control Project. Progress Report, April--June 1975
AUTHORS Kershner, C. J.; Bixel, J. C.
ORGANIZATIONAL SOURCE Mound Lab., Miamisburg, Ohio.
PAGINATION/DATE 17 Nov 75; 13p
ISSUE N3304
NTIS PRICES NTIS Prices: PC$3.50/MF$2.25
CONTRACT/GRANT NOS. E-33-1-GEN-53
CATEGORY CODES 18G; 77G
INDEX TERMS (*Tritium; *Research programs); (*Radioactive waste processing; *Gaseous wastes); Catalysts; Decontamination; Heavy water; Isotopic exchange; Liquid wastes; Radioactive effluents; Tritium compounds
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 33 04, number 07017.

ACCESSION NUMBER LA-6125-PR
TITLE Contamination Limits for Real and Personal Property. Progress Report. January--June 1975
AUTHORS Wenzel, W. J.; Healy, J. W.
ORGANIZATIONAL SOURCE Los Alamos Scientific Lab., N.Mex.
PAGINATION/DATE Oct 75; 4p
ISSUE N3304
NTIS PRICES NTIS Prices: PCS3.50/MFS2.25
CONTRACT/GRANT NOS. W-7405-ENG-36
CATEGORY CODES 18H; 77G; 68F
INDEX TERMS (*Laboratory equipment; *Decontamination); (*Clothing; Decontamination); Radioactivity; Removal; Surface contamination; Textiles
SUPPLEMENTARY TERMS *Radioactive contaminants; NTISERDA
ABSTRACT Data for the movement of various contaminants (exp 89 Sr, exp 131 I, exp 32 P) from several different laboratory surface materials and textiles were examined and the fractional amount removed per unit time fitted to an arbitrary scale of level of action. Both the nature of the contaminant and the nature of the surface appear to affect the fractional removal although data are not available to define the dependence in any detail.

ACCESSION NUMBER CONF-751121-1
TITLE Testing of Coatings for the Nuclear Industry
AUTHORS Goldberg, G.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE 1975; 23p
ISSUE N3304
NTIS PRICES NTIS Prices: PCS3.50/MFS2.25
CATEGORY CODES 11C; 18J; 71E; 77J
INDEX TERMS (*Nuclear power plants; Coatings); (*Coatings; *Decontamination); Coolant loops; Design basis accidents; Radiation effects; Simulation; Stability; Test facilities; Testing
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Coatings for commercial nuclear power plants need to withstand humidity, radiation exposure, and LOC accident conditions; they also must be decontaminable. Tests for decontaminability, radiation stability, and design-basis-accident (DBA) resistance are described. An irradiation test facility using spent fuel assemblies and a spray loop for simulating a DBA are described. A sample test report sheet is presented.

ACCESSION NUMBER ANCR-1257
TITLE Removal of the Materials Test Reactor Overhead Working Reservoir
AUTHORS Lunis, B. C.
ORGANIZATIONAL SOURCE Aerojet Nuclear Co., Idaho Falls, Idaho.
PAGINATION/DATE Oct 75; 24p
ISSUE N3304
NTIS PRICES NTIS Prices: PCS3.50/MFS2.25
CONTRACT/GRANT NOS. E(10-1)-1375
CATEGORY CODES 7E; 99E
INDEX TERMS (*Tanks; *Decontamination); (*Radioactive waste processing; *Solid wastes); Fission products; Mtr reactor; Plutonium; Radioactive waste disposal; Radioactive waste management; Uranium
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Salient features of the removal of an excessed contaminated facility, the Materials Test Reactor (MTR) overhead working reservoir (OWR) from the Test Reactor Area to the Radioactive Waste Management Complex at the Idaho National Engineering Laboratory are described. The 125-ton OWR was an overhead 160,000-gallon-capacity tank approximately 193 feet high which supplied cooling water to the MTR. Radiation at ground level beneath the tank was 5 mR/hr and approximately 600 mR/hr at the exterior surface of the tank. Sources ranging from 3 R/hr to in excess of 500 R/hr exist within the tank. The tank interior is contaminated with uranium, plutonium, and miscellaneous fission products. The OWR was lowered to ground level with the use of explosive cutters. Dismantling, decontamination, and disposal were performed by Aerojet Nuclear Company maintenance forces.

ACCESSION NUMBER BNWL-1936
TITLE Nuclear Waste Management and Transportation Quarterly Progress Report, April--June 1975
AUTHORS Platt, A. M.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE Sep 75; 75p
ISSUE N3302
NTIS PRICES NTIS Prices: PCS4.50/MFS2.25
CONTRACT/GRANT NOS. E(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS (*Radioactive waste disposal; *Research programs); (*Radioactive waste processing; Research programs); (*Waste transportation;

Research programs): Actinides: Combustion: Decontamination: Fuel cans: Hapo: Pyrolysis: Safety: Separation processes: Solidification: Transport: Tritium: Underground disposal

SUPPLEMENTARY TERMS NTISERDA

ABSTRACT Research progress is reported on all Division of Waste Management and transportation funded programs at Battelle, Pacific Northwest Laboratories, with the exception of the Commercial Radioactive Waste Fixation Program. Topics reported on include advanced methods for management and disposal of radioactive wastes; separation of actinide elements from radioactive waste; decontamination and densification of chop-leach cladding residues; pyrolysis-incineration of combustible alpha wastes, tritium separation and fixation; characterization of 300 and WYE burial grounds; disposition of retired, contaminated facilities at Hanford; development of packaging technology for Pu(NO sub 3) sub 4 shipment; and transportation safety studies.

ACCESSION NUMBER ARH-SA-221

TITLE Conceptual Design Considerations for the Storage of Solidified High-Level Waste in Canisters at a Commercial Fuel Reprocessing Plant

AUTHORS LaRiviere, J. R.; Moore, E. L.

ORGANIZATIONAL SOURCE Atlantic Richfield Hanford Co., Richland, Wash.

PAGINATION/DATE Nov 75; 19p

ISSUE N3302

NTIS PRICES NTIS Prices: PC$3.50/MF$2.25

REPORT NOS. CONF-751107-3

CONTRACT/GRANT NOS. E(45-1)-2130

CATEGORY CODES 18G; 77G

INDEX TERMS (*Containers; *Design); (*Radioactive waste storage; *Research programs); Air; Coolants; Cooling; Corrosion; Cracks; Decontamination; Fuel reprocessing plants; Solid wastes; Stainless steels; Water

SUPPLEMENTARY TERMS NTISERDA

ABSTRACT Onsite storage of canisters of solidified high-level waste generated by the commercial fuel reprocessing plants (FRP) may be required prior to shipping these canisters to a Federal repository. The most likely storage concept is to hold the waste-filled canisters in water storage basins. In the Retrievable Surface Storage Facility conceptual design studies, air-cooled and water-cooled storage

of solidified high-level wastes has been considered. The studies of water-cooled storage included design considerations, as part of the conceptual design of the canisters and water storage basins, that would apply also to the conceptual design of similar facilities at an FRP. These similar considerations include: types of corrosion likely to develop on canisters stored in water, conditions that promote stress corrosion cracking (SCC), prevention of SCC, routine basin water cleanup, cleanup of a grossly contaminated water basin, effluent discharge discussions, storage basin integrity, and designing for decommissioning.

ACCESSION NUMBER	ANCR-1170
TITLE	Decontamination and Decommissioning of the Ebr-I Complex. Topical Report No. 3, Nak Disposal Pilot Plant Test
AUTHORS	Commander, J. C.; Lewis, L.; Hammer, R.
ORGANIZATIONAL SOURCE	Aerojet Nuclear Co., Idaho Falls, Idaho Idaho National Engineering Lab.
PAGINATION/DATE	Jun 75; 24p
ISSUE	N3302
NTIS PRICES	NTIS Prices: PCS3.50/MFS2.25
CATEGORY CODES	18E; 77H
INDEX TERMS	(*Ebr-1 reactor; *Decommissioning); Decontamination; Nak cooled reactors; Radioactive waste disposal
SUPPLEMENTARY TERMS	NTISERDA
ABSTRACT	Decontamination and decommissioning of the Experimental Breeder Reactor No. 1 (EBR-I) requires processing of the primary coolant, an eutectic solution of sodium and potassium (NaK), remaining in the EBR-I primary and secondary coolant systems. While developing design criteria for the NaK processing system, reasonable justification was provided for the development of a pilot test plant for field testing some of the process concepts and proposed hardware. The objective of this activity was to prove the process concept on a low-cost, small-scale test bed. The pilot test plant criteria provided a general description of the test including: the purpose, location, description of test equipment available, waste disposal requirements, and a flow diagram and conceptual equipment layout. The pilot plant test operations procedure provided a detailed step-by-step procedure for operation of the pilot plant to obtain the desired test data

and operational experience. It also spelled out the safety precautions to be used by operating personnel, including the requirement for alkali metals training certification, use of protective clothing, availability of fire protection equipment, and caustic handling procedures. The pilot plant test was performed on May 16, 1974. During the test, 32.5 gallons or 240 lb of NaK was successfully converted to caustic by reaction with water in a caustic solution.

ACCESSION NUMBER	AD-A020 193/9SL
TITLE	Decontamination of Water Containing Radiological Warfare Agents
TITLE NOTE	Technical rept. Nov 49-Nov 75
AUTHORS	Lindsten, Don C.; Schmitt, Richard P.
ORGANIZATIONAL SOURCE	Army Mobility Equipment Research and Development Center Fort Belvoir Va
PAGINATION/DATE	Mar 75; 94p
ISSUE	U7607
NTIS PRICES	NTIS Prices: PC$5.00/MF$2.25
REPORT NOS.	USAMERDC-2136
PROJECT NOS.	DA-1-G-762708-AH-67
TASK NOS.	1-G-762708-AH-67-WA
CATEGORY CODES	18H; 15F; 13B; 77G; 68F; 68D; 74H
INDEX TERMS	*Radioactive wastes; *Water pollution; *Decontamination; *Nuclear warfare; *Water treatment; Purification; Radioactive contamination; Radioactive isotopes; Distillation; Ion exchange; Ground water; Radiation hazards; Monitoring; Coagulation; Disinfection; Filtration; Fission product poisoning; Field tests; Radiation measuring instruments
SUPPLEMENTARY TERMS	Reverse osmosis; NTISDODA
ABSTRACT	This report summarizes research and development studies conducted by the U.S. Army since 1949 on the decontamination of water containing radiological substances. It was found that nuclear weapons can seriously contaminate field water supplies with fission products, unfissioned uranium or plutonium, or neutron-activated radioisotopes. A semiquantitative check of the level of activity in water can be made with a standard PDR-27 beta-gamma radiation meter. The standard Army ERDLator Unit is effective removing radioactive substances from water when present as suspended turbidity. The ERDLator Unit will not remove radioactive contaminants present as soluble radioisotopes. The standard Army Ion Exchange

Unit, used as a post treatment device after the ERDLator Unit, removes soluble activity. The standard Army vapor compression distillation unit is effective in decontaminating water containing radioactive material. The reverse osmosis water purification process holds promise of a high level of decontamination of radioactivity present in the water in both the soluble and insoluble states.

ACCESSION NUMBER ZAED-BIBL.-02-16
TITLE Bibliographies in Nuclear Science and Technology. Section 02: Contamination and Decontamination of Foods. Number 16
AUTHORS Fischer, E.
ORGANIZATIONAL SOURCE Zentralstelle fuer Atomkernenergie-Dokumentation. Leopoldshafen, (F.R. Germany).
PAGINATION/DATE Jun 75; 34p
ISSUE N3301
NTIS PRICES NTIS Prices: PCS4.00/MFS2.25
AVAILABILITY In German and English. U.S. Sales Only.
CATEGORY CODES 8H; 68F
INDEX TERMS (*Food; *Bibliographies); (*Food chains; *Radionuclide migration); Contamination; Decontamination; Environment; Fallout deposits; Radioactive effluents; Radioactivity; Radionuclide kinetics
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT This bibliography contains annotated references to some 150 published documents from the world literature on food contamination by radioisotopes and decontamination procedures.

ACCESSION NUMBER ZAED-BIBL.-02-15
TITLE Bibliographies in Nuclear Science and Technology. Section 02: Contamination and Decontamination of Foods. Number 15
ORGANIZATIONAL SOURCE Zentralstelle fuer Atomkernenergie-Dokumentation. Leopoldshafen (F.R. Germany).
PAGINATION/DATE Feb 75; 31p
ISSUE N3301
NTIS PRICES NTIS Prices: PCS4.00/MFS2.25
AVAILABILITY In German and English. U.S. Sales Only.
CATEGORY CODES 8H; 68F
INDEX TERMS (*Food; *Bibliographies); (*Food chains; *Radionuclide migration); Contamination; Decontamination; Environment; Fallout

	deposits; Radioactive effluents; Radioactivity; Radionuclide kinetics
SUPPLEMENTARY TERMS	NTISERDA
ABSTRACT	This bibliography contains annotated references to some 100 recent publications on food contamination by radioisotopes and decontamination procedures.

ACCESSION NUMBER	ORNL-5060
TITLE	Models for Calculating the Effects of Isotopic Exchange, Radioactive Decay, and of Recycle in Removing Iodine from Gas and Liquid Streams
AUTHORS	Davis, W. Jr
ORGANIZATIONAL SOURCE	Oak Ridge National Lab., Tenn.
PAGINATION/DATE	Sep 75; 38p
ISSUE	N3301
NTIS PRICES	NTIS Prices: PCS4.00/MFS2.25
CONTRACT/GRANT NOS.	W-7405-eng-26
CATEGORY CODES	1?G; 77G
INDEX TERMS	(*Iodine 129; *Isotopic exchange); (*Iodine 131; Isotopic exchange); (*Radioactive waste processing; *Gaseous wastes); Decay; Decontamination; Isotope ratio; Liquid wastes; Mathematical models; Nuclear fuels; Reprocessing; Silver compounds; Zeolites
SUPPLEMENTARY TERMS	NTISERDA
ABSTRACT	Different decontamination factors for exp 129 I and exp 131 I are frequently invoked in environmental impact reports concerned with nuclear fuel recycle. Selected differences, or ratios, have not been justified on the basis of mathematical models or experimental data. A description is given of the origins of these differences in terms of isotopic exchange and material balance equations for the short- and long-lived (or stable) isotopes. The ratios of decontamination factors can be calculated when there is complete attainment of isotopic exchange between gas- or liquid-phase iodine and iodine sorbed by a solid or liquid. If there is no exchange, decontamination factors are isotope-independent unless material recycle occurs within the system. Between these extremes, there can be decontamination factors whose explanation requires experimental determination of the extent of exchange. The model applies to other radioactive isotopes of iodine as well as to other elements with short- and long-lived (or stable) isotopes.

ACCESSION NUMBER	CONF-750902-9
TITLE	Volume Reduction and Salvage Considerations for Plutonium-Contaminated Ferrous Metal
AUTHORS	Levitz, N.; Gerding, T. H.; Winsch, I. O.; Cannon, T. F.; Steindler, M. J.
ORGANIZATIONAL SOURCE	Argonne National Lab., Ill.
PAGINATION/DATE	1975; 23p
ISSUE	N3212
NTIS PRICES	NTIS Prices: PC$3.50/MF$2.25
CONTRACT/GRANT NOS.	W-31-109-Eng-38
CATEGORY CODES	18G; 77G
INDEX TERMS	(*Steels; *Decontamination); (*Plutonium; *Removal); (*Radioactive waste processing; *Research programs); Qualitative chemical analysis; Radioactive wastes; Reviews; Scintillation counting; Volume
SUPPLEMENTARY TERMS	NTISERDA

ABSTRACT

A survey of the literature and discussions at pertinent sites operated for ERDA disclosed an inventory exists of plutonium-contaminated metal. Reliable assay of much of the waste for plutonium content requires reliable sampling and is virtually impossible because of its heterogeneous nature. Work on assay methods, particularly nondestructive assay (NDA) techniques, continues to be monitored. Transforming the metal waste to a standard form such as an ingot or slab by melting (melt-refining) should facilitate both sampling and assay and has been selected for exploratory study. Present emphasis of work is on ferrous materials. Small-scale studies on the melt-refining of steel contaminated with plutonium are just getting started in a glove box facility. Support work on noncontaminated steel is in progress using UO sub 2 as a stand-in for PuO sub 2 . Preliminary results in steel-melting tests without slags indicate some of the commercial fire-brick materials may be satisfactory as crucibles. UO sub 2 , added as a stand-in for PuO sub 2 in the support work, appears to be not wetted by the molten steel and remains in the crucible when the molten steel is poured into a mold. Crucible-slag combinations are undergoing compatibility testing in the support studies. Initial work with cryolite as a slag proved very corrosive to a MgO crucible. An ultimate goal of this work is the decontamination of plutonium-contaminated metal in the light of criteria for re-use release, or disposal.

ACCESSION NUMBER BNWL-SA-5514
TITLE Pnl Studies of D and D at Hanford
AUTHORS Harmon, K. M.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE 1975; 20p
ISSUE N3212
NTIS PRICES NTIS Prices: PCS3.50/MFS2.25
REPORT NOS. CONF-750R22-8
CONTRACT/GRANT NOS. AT(45-1)-1830
CATEGORY CODES 7E; 99E
INDEX TERMS (*Nuclear facilities; *Decommissioning); Decontamination; Economics; Hapo; Radioactive waste disposal; Radionuclide migration; Safety
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT The PNL decontamination and decommissioning program at Hanford involves (1) the preparation of a long-term plan for a systematic approach to the extensive and varied programs of decommissioning retired facilities at Hanford and (2) a D and D demonstration project, the decommissioning of a grossly contaminated plutonium processing facility.

ACCESSION NUMBER ORNL-tr-2845
TITLE Civil Defense
AUTHORS Titov, M. N.; Egorov, P. T.; Gayko, B. A.
PAGINATION/DATE 1974; 129p
ISSUE N3209
NTIS PRICES NTIS Prices: PCS6.00/MFS2.25
AVAILABILITY Translation of Grazhdanskaya oborona.
CATEGORY CODES 15C; 91I
INDEX TERMS (*Ussr; Civil defense); (*Civil defense; *Manuals); (*Human populations; *Radiation protection); Decontamination; Design; Education; Environment; Nuclear weapons; Public health; Radiation monitoring; Safety; Shelters; Transport; Urban populations
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 32 09, number 24071.

ACCESSION NUMBER MLM-2235
TITLE Tritium Effluent Control Project. Progress Report, January--March 1975
AUTHORS Kershner, C. J.; Bixel, J. C.
ORGANIZATIONAL SOURCE Mound Lab., Miamisburg, Ohio.
PAGINATION/DATE 27 Aug 75; 28p
ISSUE N3210
NTIS PRICES NTIS Prices: PCS4.00/MFS2.25

CONTRACT/GRANT NOS. E-33-1-GEN-53
CATEGORY CODES 18G; 77G
INDEX TERMS (*Tritium; *Radioactive waste processing); Chemical reaction kinetics; Decontamination; Gettering; Gloveboxes; Heavy water; Hydrogen; Infrared spectra; Isotope effects; Isotopic exchange; Research programs; Tritium compounds; Water
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT The 100-cfm. pilot-scale helium purification unit was installed in the Tritium Effluent Control Laboratory. Hydrogen-HIP alloy isotherm data were obtained at 28, 200, 400, and 600 exp O C. In order to more clearly define the frequency and power of IR radiation required for the molecular excitation scheme, a study of the HDO IR spectrum was undertaken. The continuing theoretical analysis of the H sub 2 O/H sub 2 system led to three major results: (1) the isotope effects on the key reactions in the H sub 2 O/H sub 2 system were calculated and will be used to model the kinetics of the scavenging process; (2) the rate of the exchange reaction, T + H sub 2 O implies HTO + H, was analyzed with a simple theoretical model and shown to be extremely slow relative to the exchange reaction, T + H sub 2 implies HT + H; and (3) the effect of tritium beta decay on the H sub 2 O/H sub 2 system was calculated in a qualitative manner.

ACCESSION NUMBER MLM-2217
TITLE Tritium Effluent Control Project. Progress Report, October--December 1974
AUTHORS Kershner, C. J.
ORGANIZATIONAL SOURCE Mound Lab., Miamisburg, Ohio.
PAGINATION/DATE 25 Aug 75; 23p
ISSUE N3210
NTIS PRICES NTIS Prices: PCS3.50/MFS2.25
CONTRACT/GRANT NOS. E-33-1-GEN-53
CATEGORY CODES 18G; 77G
INDEX TERMS (*Tritium; *Radioactive waste processing); Adsorption; Amides; Computer codes; Cryogenics; Decontamination; Distillation; Dirso; Electrolysis; Gettering; Hydrogen; Liquid wastes; Photolysis; Radioactive effluents; Research programs
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT Installation of the pilot-scale cryogenic adsorbate separation system in the new Tritium Effluent Control Laboratory is beyond 50 percent completion. In the hydrogen

gettering study. HIP alloy was found to sorb 2.2 wt percent hydrogen at room temperature. The possibilities for tritium decontamination by molecular excitation were investigated. The best scheme for tritium removal was determined to be selective photodissociation of HTO in the presence of H sub 2 . Three additional materials were evaluated for use in an extractive distillation system for tritiated liquid waste decontamination. A computer program was developed for calculating operating and design parameters for catalytic exchange enrichment and stripping of tritiated water.

ACCESSION NUMBER KFK-2126
TITLE Decontamination Services: Annual Report, 1973
AUTHORS Krause, H.; Rudolph, G.
ORGANIZATIONAL SOURCE Kernforschungszentrum Karlsruhe (F.R. Germany). Abt. Dekontaminationsbetriebe.
PAGINATION/DATE May 75; 149p
ISSUE N3209
NTIS PRICES NTIS Prices: PC$6.00/MF$2.25
AVAILABILITY In German. U.S. Sales Only.
CATEGORY CODES 18G; 77G
INDEX TERMS (*Radioactive waste processing; *Combustion); (*German federal republic; *Radioactive waste disposal); (*Bitumens; *Chemical radiation effects); (*Sodium nitrates; Chemical radiation effects); Casks; Corrosive effects; Decontamination; Design; Diffusion; Efficiency; Liquid wastes; Nitric acid; Packaging; Pilot plants; Plutonium; Potassium chlorides; Potassium hydroxides; Primary coolant circuits; Pwr type reactors; Radionuclide migration; Silver chlorides; Sodium hydroxides; Soils; Solidification; Steels; Surfaces; Underground disposal; Vitrification
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT No abstract available.

ACCESSION NUMBER CONF-750822-6
TITLE Status of ANSI Standards on Decommissioning of Nuclear Reprocessing Facilities
AUTHORS Graham, H. B.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE 1975; 7p
ISSUE N3210
NTIS PRICES NTIS Prices: PC$3.50/MF$2.25
CATEGORY CODES 18J; 77I

INDEX TERMS (*Fuel reprocessing plants; *Decommissioning); Decontamination; Design; Reprocessing; Spent fuels

SUPPLEMENTARY TERMS NTISERDA

ABSTRACT A definition of decommissioning is given, and the preparation of ANSI Standard, ''General Design Criteria for Nuclear Reprocessing Facilities'' (N101.3) is discussed. A Eurochemic report, entitled ''The Shutdown of Reprocessing Facilities--Results of Preliminary Studies on the Installations Belonging to Eurochemic.'' was used in the preparation of this standard.

ACCESSION NUMBER AD-A017 470/6SL

TITLE Current Status of Countermeasures against Radiological Contamination Resulting from an Atomic Detonation. Part II

AUTHORS Ksanda, C. F.; Strope, W. E.

ORGANIZATIONAL SOURCE Naval Radiological Defense Lab San Francisco Calif

PAGINATION/DATE 1 Jul 51; 138p

ISSUE U7601

NTIS PRICES NTIS Prices: PCS6.00/MFS2.25

REPORT NOS. USNRDL-AD-327(Z)

CATEGORY CODES 18C; 18H; 6P

INDEX TERMS *Nuclear explosions; *Fallout; *Radiation hazards; Radioactive contamination; Dosage; Decontamination

SUPPLEMENTARY TERMS NTISDODN

ABSTRACT This document consists of several appendices which serve as supporting evidence and/or expansion of the text of AD-326(Z), Current Status of Countermeasures Against Radiological Contamination Resulting from an Atomic Detonation --- 1 July 1951, Part I.

ACCESSION NUMBER RN-S-0012

TITLE Radioactive Materials Complex Design Data and Studies

ORGANIZATIONAL SOURCE Aerojet-General Corp., Azusa, Calif.

PAGINATION/DATE Feb 64; 35p

ISSUE N3207

NTIS PRICES NTIS Prices: PCS4.75/MFS2.25

CATEGORY CODES 18N; 77C

INDEX TERMS (*Nerva reactor; Radioactive waste facilities); (*Radioactive waste facilities; *Design); Decontamination; Feasibility studies; Radioactive materials; Radioactive waste disposal; Radioactive waste storage; Spent fuel storage

SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 32 07, number 18940.

ACCESSION NUMBER ORNL-TM-4923
TITLE Monitoring and Analysis of Process Streams in a Krypton-85 off-Gas Decontamination System
AUTHORS Levins, D. M.; Glass, R. W.; Chiles, M. M.; Inman, D. J.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE Jul 75; 48p
ISSUE N3207
NTIS PRICES NTIS Prices: PCS5.45/MFS2.25
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 18G; 77G
INDEX TERMS (*Fuel reprocessing plants; *Off-gas systems); (*Krypton 85; *Radiation monitoring); Adsorption; Carbon dioxide; Chlorinated aliphatic hydrocarbons; Fluorinated aliphatic hydrocarbons; Mass spectroscopy; Radioactive waste processing
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT The methods used to monitor, sample, and analyze process streams in the Experimental Engineering Section Off-Gas Decontamination Facility are described. This facility is designed to study the removal of noble gases, particularly exp 85 Kr, from reactor fuel reprocessing off-gas streams by high pressure scrubbing with liquid carbon dioxide or Freon. Krypton-85 concentrations in the most important gas streams are monitored continuously with beta-sensitive radiation detectors using a CaF sub 2 (Eu) scintillation disc. These detectors were designed specifically for use with corrosive fluids at high pressures. Representative samples of gas and liquid are withdrawn from 14 process streams via a semiautomatic sampling system. These samples are then analyzed for exp 85 Kr using a beta detector, and for inactive constituents by mass spectrometry.

ACCESSION NUMBER BNWL-1917
TITLE Decontamination and Decommissioning of Nuclear Facilities: A Literature Search
AUTHORS Sande, W. E.; Freeman, H. D.; Hanson, M. S.; McKeever, R. L.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE May 75; 155p

ISSUE N3207
NTIS PRICES NTIS Prices: PCS5.15/MFS2.25
CONTRACT/GRANT NOS. AT(45-1)-1830
CATEGORY CODES 7E; 99E
INDEX TERMS (*Nuclear facilities; Decommissioning); (*Decommissioning; *Bibliographies); (*Decontamination; Bibliographies); Equipment
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT This bibliography includes 429 unclassified references to the decontamination and decommissioning of nuclear facilities. The references are arranged in chronological order and cover the period from 1944 through 1974. Subject and author indexes are provided.

ACCESSION NUMBER BNWL-1913
TITLE Nuclear Waste Management and Transportation Quarterly Progress Report, January--March 1975
AUTHORS Platt, A. M.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE Jun 75; 79p
ISSUE N3206
NTIS PRICES NTIS Prices: PCS7.60/MFS2.25
CONTRACT/GRANT NOS. AT(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS (*Radioactive waste disposal; *Research programs); (*Radioactive waste processing; Research programs); (*Waste transportation; Research programs); Actinides; Combustion; Decontamination; Fuel cans; Hapo; Plutonium nitrates; Safety; Separation processes; Solidification; Transport; Tritium; Underground disposal
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT No abstract available.

ACCESSION NUMBER AGC-2584
TITLE Operational Requirements for Radioactive Materials Handling, Decontamination, and Storage Complex at Nrds
ORGANIZATIONAL SOURCE Aerojet-General Corp., Azusa, Calif.
PAGINATION/DATE Jun 63; 97p
ISSUE N3207
NTIS PRICES NTIS Prices: PCS8.00/MFS2.25
CATEGORY CODES 18N; 77C
INDEX TERMS (*Nerva reactor; Radioactive waste facilities); (*Radioactive waste facilities; *Specifications); Decontamination; Radioactive materials; Radioactive waste

	fuel storage
SUPPLEMENTARY TERMS	NTISERDA
ABSTRACT	For abstract, see NSA 32 07, number 18903.

ACCESSION NUMBER	BNWL-tr-145
TITLE	Decontamination Section Annual Report, 1972
AUTHORS	Krause, H.
ORGANIZATIONAL SOURCE	Kernforschungszentrum Karlsruhe (F.R. Germany).
PAGINATION/DATE	1972; 148p
ISSUE	N3204
NTIS PRICES	NTIS Prices: PC$10.50/MF$2.25
AVAILABILITY	Translation of KFK--2000.
CATEGORY CODES	18G; 77G
INDEX TERMS	(*Bitumens; *Chemical radiation effects); (*Fission products; *Denitration); (*Radioactive waste processing; *Evaporation); (*Manganese oxides; *Thermite process); Aluminium; Aqueous solutions; Charcoal; Decontamination; Detergents; Formic acid; Heavy water; Liquid wastes; Physical radiation effects; Purification; Pyrolysis; Radioactive waste disposal; Radioactive waste storage; Radiosterilization; Regeneration; Solidification; Surfaces; Tritium compounds; Underground disposal; Vitrification; Waste water
SUPPLEMENTARY TERMS	NTISERDA
ABSTRACT	A number of bitumen-salt mixtures were prepared in order to investigate their resistance to irradiation and their thermal stability. Denitration by formic acid of fission product solutions could be extended into a conditioning procedure. Studies on fixation of highly active fission products in glass and production of glass were reported. In studies on conventional waste water treatment experiments were carried out which related to the chemical regeneration of active charcoal, the purification through active charcoal of effluent water from cellulose plants, and the conditioning through irradiation of waste water. Preparations have begun at the borehole to be used for the disposal of tritiated waste waters. (JSR) .

ACCESSION NUMBER SAAS-171
TITLE Reports of the State Ministries for Atomic Safety and Radiation Protection of the Ddr
ORGANIZATIONAL SOURCE Staatliches Amt fuer Atomsicherheit und Strahlenschutz, Berlin (German Democratic Republic).
PAGINATION/DATE Nov 74; 30p
ISSUE N3203
NTIS PRICES NTIS Prices: PCS4.50/MFS2.25
AVAILABILITY In German. U.S. Sales Only.
CATEGORY CODES 7E; 99E
INDEX TERMS Decontamination; German democratic republic; Leading abstract; Radiation protection; Transport
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 32 03, number 06054.

ACCESSION NUMBER AED-C-13-10(1974)
TITLE Bibliographies in Nuclear Science and Technology. Section 13. Decontamination. Number 10
AUTHORS Philipp, H.; Wichmann, E.
ORGANIZATIONAL SOURCE Zentralstelle fuer Atomkernenergie-Dokumentation, Leopoldshafen (F.R. Germany).
PAGINATION/DATE Dec 74; 50p
ISSUE N3112
NTIS PRICES NTIS Prices: PCS5.50/MFS2.25
AVAILABILITY In several languages. U.S. Sales Only.
CATEGORY CODES 7E; 99E
INDEX TERMS (*Decontamination; *Bibliographies); Animals; Buildings; Gases; Laboratory equipment; Liquids; Man; Surfaces
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 31 12, number 32625.

ACCESSION NUMBER ANL-8152
TITLE Chemical Engineering Division Waste Management Programs. Quarterly Report, July--September 1974
AUTHORS Steindler, M. J.; Levitz, N. M.; Mecham, W. J.; Seefeldt, W. B.; Trevorrow, L. E.
ORGANIZATIONAL SOURCE Argonne National Lab., Ill.
PAGINATION/DATE Feb 75; 27p
ISSUE N3111
NTIS PRICES NTIS Prices: PCS4.00/MFS2.25
CONTRACT/GRANT NOS. W-31-109-eng-38
CATEGORY CODES 18G; 77G
INDEX TERMS (*Fuel cans; *Reprocessing); (*Zircaloy; *Chemical reactions); (*Zinc chlorides;

	Chemical reactions): (*Tritium: *Isotopic exchange): Cost: Decontamination: Liquid wastes: Radioactive waste processing: Separation processes: Solid wastes: Spent fuel elements: Temperature dependence
SUPPLEMENTARY TERMS	NTISERDA
ABSTRACT	For abstract, see NSA 31 11, number 29168.

ACCESSION NUMBER	AGC-2711(Vol.1)(Bk.1)
TITLE	E-MAD and Support Facilities Complex. Operations Data Book. Volume I. Book I. Summary
ORGANIZATIONAL SOURCE	Aerojet-General Corp., Sacramento, Calif.
PAGINATION/DATE	1 Feb 64: 149p
ISSUE	N3111
NTIS PRICES	NTIS Prices: PC$10.50/MF$2.25
CATEGORY CODES	21F: 81I
INDEX TERMS	(*Nerva reactor: Test facilities): (*Test facilities: *Operation): (*Remote handling equipment: Operation): Decontamination: Hot cells: Inspection: Management: Radioactive waste disposal: Radioactive wastes: Specifications: Spent fuels
SUPPLEMENTARY TERMS	NTISERDA
ABSTRACT	For abstract, see NSA 31 11, number 29340.

ACCESSION NUMBER	PATENT-3 852 407
TITLE	Method for Removing Alkyl Iodides from Air by Mercuric Nitrate Solution
TITLE NOTE	Patent
AUTHORS	Schmitt, John M.: Crouse, David J. Jr: Howerton, William B.
ORGANIZATIONAL SOURCE	Atomic Energy Commission, Washington, D.C.
PAGINATION/DATE	Filed 8 Aug 72, patented 3 Dec 74: 9p
ISSUE	U7515
NTIS PRICES	NTIS Prices: Not available NTIS
AVAILABILITY	Government-owned invention available for licensing. Copy of patent available Commissioner of Patents, Washington, D.C. 20231 $0.50.
REPORT NOS.	PAT-APPL-278 842
CATEGORY CODES	07A: 18G: 90B: 77G
INDEX TERMS	*Patents: *Gas purification: *Iodine: *Iodoalkanes: *Radioactive waste processing: Nitric acid: Scrubbers: Mercury inorganic compounds: Decontamination: Precipitation(Chemistry): Sorption: Oxidation
SUPPLEMENTARY TERMS	Mercury iodates: Mercury nitrates: PAT-CL-423-240: NTISGPERDA
ABSTRACT	The patent describes an improved process for contacting and removing iodine and

particularly alkyl iodides from an air stream comprising the use of a relatively concentrated nitric acid solution comprising mercuric ions recycled through a gas contactor. Concurrently, a minor fraction of the solution is passed through an evaporator to oxidize and concentrate the accumulated iodine causing it to precipitate as mercuric iodate, thereby allowing essentially complete recycle of the mercury and nitric acid. The process is useful for decontamination of a gas containing fuel fission products.

ACCESSION NUMBER ZAED-BIBL.-02-14
TITLE Bibliographies in Nuclear Science and Technology. Section 02: Contamination and Decontamination of Foods. Number 14
AUTHORS Fischer, E.
ORGANIZATIONAL SOURCE Zentralstelle fuer Atomkernenergie-Dokumentation, Leopoldshafen (F.R. Germany).
PAGINATION/DATE Nov 74; 32p
ISSUE N3110
NTIS PRICES NTIS Prices: PC$4.75/MF$2.25
AVAILABILITY In German and English. U.S. Sales Only.
CATEGORY CODES 8H; 68F; 57H
INDEX TERMS (*Food; *Contamination); (*Food chains; *Radionuclide kinetics); Animal feeds; Bibliographies; Decontamination; Environment; Health hazards; Human populations; Radioactivity; Radioisotopes; Radionuclide migration
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 31 10, number 25780.

ACCESSION NUMBER WANL-TME-245
TITLE Nrds Radioactive Materials Handling, Decontamination and Storage Complex
AUTHORS Wood, T. A.
ORGANIZATIONAL SOURCE Westinghouse Electric Corp., Pittsburgh, Pa. Astronuclear Lab.
PAGINATION/DATE 11 Jan 63; 5p
ISSUE N3110
NTIS PRICES NTIS Prices: PC$4.00/MF$2.25
CATEGORY CODES 21F
INDEX TERMS (*Nerva reactor; *Radioactive waste storage); (*Radioactive waste facilities; *Operation); Containers; Decontamination; Performance testing; Radioactive waste management; Spent fuel storage; Test facilities
SUPPLEMENTARY TERMS NTISERDA

ABSTRACT For abstract, see NSA 31 10, number 26509.

ACCESSION NUMBER RN-S-0007
TITLE Decontamination Facility and Warm Equipment and Parts Storage Facility. Design Criteria
ORGANIZATIONAL SOURCE Aerojet-General Corp., Azusa, Calif.
PAGINATION/DATE Feb 64; 91p
ISSUE N3110
NTIS PRICES NTIS Prices: PC$7.75/MF$2.25
CATEGORY CODES 21F
INDEX TERMS (*Nerva reactor; *Spent fuels); (*Radioactive waste facilities; *Specifications); Decontamination; Design; Radioactive waste storage; Spent fuel storage; Test facilities
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 31 10, number 26507.

ACCESSION NUMBER NVO-410-29
TITLE Onsite Environmental Sciences Activities During the Baneberry Event
AUTHORS Roy, T. C.; Eubank, B. F.
ORGANIZATIONAL SOURCE Reynolds Electrical and Engineering Co., Inc., Las Vegas, Nev.
PAGINATION/DATE Jun 73; 58p
ISSUE N3110
NTIS PRICES NTIS Prices: PC$5.45/MF$2.25
CONTRACT/GRANT NOS. AT(26-1)-410
CATEGORY CODES 8H; 68F
INDEX TERMS (*Baneberry event; *Radiation monitoring); (*Environment; *Decontamination); Contained explosions; Human populations; Nuclear explosions; Personnel; Planning; Radiation protection; Underground explosions
SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 31 10, number 25768.

ACCESSION NUMBER ARH-ST-106
TITLE P-11 Facility Cleanup Summary Report
AUTHORS Raile, M. N.
ORGANIZATIONAL SOURCE Atlantic Richfield Hanford Co., Richland, Wash.
PAGINATION/DATE Dec 74; 47p
ISSUE N3110
NTIS PRICES NTIS Prices: PC$4.25/MF$2.25
CONTRACT/GRANT NOS. AT(45-1)-2130
CATEGORY CODES 7E; 99E
INDEX TERMS (*Buildings; *Decommissioning); (*Plutonium; *Radioactive waste storage); Decontamination; Demolition; Removal

SUPPLEMENTARY TERMS NTISERDA
ABSTRACT For abstract, see NSA 31 10, number 25321.

ACCESSION NUMBER ORNL-TM-4596
TITLE System Features and Component Descriptions for the Unit Operations off-Gas Decontamination Facility
AUTHORS Glass, R. W.; Cochran, H. D. Jr.; Levins, D. M.; Snider, J. W.; Watkin, D. C.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE Feb 75; 144p
ISSUE N3108
NTIS PRICES NTIS Prices: PCS7.60/MF$2.25
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 18J; 77I
INDEX TERMS (*Fuel reprocessing plants; *Off-gas systems); (*Krypton; *Adsorption); (*Radioactive waste processing; *Gaseous wastes); Carbon dioxide; Design; Htgr type reactors; Lmfbr type reactors; Pilot plants; Reprocessing; Safety; Spent fuels
SUPPLEMENTARY TERMS NTISAEC
ABSTRACT For abstract, see NSA 31 08, number 19369.

ACCESSION NUMBER KFK-2000
TITLE Decontamination Services: Annual Report, 1972
AUTHORS Krause, H.
ORGANIZATIONAL SOURCE Kernforschungszentrum Karlsruhe (F.R. Germany). Abt. Dekontaminationsbetriebe.
PAGINATION/DATE Nov 74; 140p
ISSUE N3108
NTIS PRICES NTIS Prices: PCS10.00/MF$2.25
AVAILABILITY In German. U.S. Sales Only.
CATEGORY CODES 18G; 77G
INDEX TERMS (*Bitumens; *Chemical radiation effects); (*Salts; Chemical radiation effects); (*Radioactive waste processing; *Research programs); Activated carbon; Cleaning; Decontamination; Fission products; Glass; Liquid wastes; Radioactive waste disposal; Radioactive wastes; Solidification; Stability; Vitrification
SUPPLEMENTARY TERMS NTISAEC
ABSTRACT For abstract, see NSA 31 08, number 19361.

ACCESSION NUMBER LA-5755
TITLE Demolition of Building 12, an Old Plutonium Filter Facility
AUTHORS Christensen, E. L.; Garde, R.; Valentine, A. M.
ORGANIZATIONAL SOURCE Los Alamos Scientific Lab., N.Mex.
PAGINATION/DATE Jan 75; 20p
ISSUE N3107
NTIS PRICES NTIS Prices: PCS4.00/MFS2.25
CONTRACT/GRANT NOS. W-7405-eng-36
CATEGORY CODES 18I; 68F
INDEX TERMS (*Nuclear facilities; *Demolition); Air filters; Buildings; Decontamination; Environmental effects; Lasl; Plutonium; Radioactive waste disposal; Safety; Ventilation
SUPPLEMENTARY TERMS NTISAEC
ABSTRACT For abstract, see NSA 31 07, number 16501.

ACCESSION NUMBER AGC-2592
TITLE Radioactive Material Handling, Decontamination, and Storage Complex. Design Concept and Criteria
ORGANIZATIONAL SOURCE Aerojet-General Corp., Azusa, Calif.
PAGINATION/DATE Jun 63; 146p
ISSUE N3107
NTIS PRICES NTIS Prices: PCS10.50/MFS2.25
CATEGORY CODES 18G; 77G
INDEX TERMS (*Radioactive waste facilities; *Design); (*Radioactive materials; *Materials handling); Decontamination; Spent fuel storage
SUPPLEMENTARY TERMS NTISAEC
ABSTRACT For abstract, see NSA 31 07, number 17578.

ACCESSION NUMBER ANL-8134
TITLE Chemical Engineering Division Waste Management Programs Quarterly Report, April--June 1974
AUTHORS Steindler, M. J.; Levitz, N. M.; Mecham, W. J.; Seefeldt, W. B.; Trevorrow, L. E.
ORGANIZATIONAL SOURCE Argonne National Lab., Ill.
PAGINATION/DATE Nov 74; 54p
ISSUE N3106
NTIS PRICES NTIS Prices: PCS5.45/MFS2.25
CONTRACT/GRANT NOS. W-31-109-eng-38
CATEGORY CODES 18G; 77G
INDEX TERMS (*Radioactive waste management; *Research programs); Containers; Decontamination; Equipment; Radioactive waste disposal; Radioactive waste processing; Radioactive

	waste storage; Reprocessing; Spent fuels; Underground disposal
SUPPLEMENTARY TERMS	NTISAEC
ABSTRACT	For abstract, see NSA 31 06, number 14711.

ACCESSION NUMBER	PATENT-3 825 650
TITLE	Decontaminating Uranium by Reaction with ClF3 and HF and Volatizing the UF6 Product
TITLE NOTE	Patent
AUTHORS	Gustison, Robert A.; Bernhardt, Harvey A.; Barber, Eugene J.; Senton, Samuel T.
ORGANIZATIONAL SOURCE	Atomic Energy Commission, Washington, D.C.
PAGINATION/DATE	Filed 18 Jun 54, patented 23 Jul 74; 4p
ISSUE	U7508
NTIS PRICES	NTIS Prices: Not available NTIS
AVAILABILITY	Government-owned invention available for licensing. Copy of patent available Commissioner of Patents, Washington, D.C. 20231 $0.50.
REPORT NOS.	PAT-APPL-437 903
CATEGORY CODES	12J; 77I; 90B; 90C
INDEX TERMS	*Patents; *Nuclear fuel reprocessing; *Uranium fluorides; *Fluorination; Chlorine fluorides; Vaporizing
SUPPLEMENTARY TERMS	PAT-CL-423-19; Chlorine fluorides(ClF3); NTISGPAEC
ABSTRACT	The invention relates to a method of decontaminating uranium of extraneous impurities and more particularly to a method of decontaminating uranium contaminated with fission products and plutonium. With a knowledge of the difficulties, an object of the invention is to provide a flurination process for the recovery and decontamination of uranium contaminated with fission products and plutonium in a form suitable for direct introduction into a gaseous diffusion cascade. An additional object is to provide a fluorination process for the recovery and decontamination of uranium contaminated with fission products and plutonium which surmounts azeotrope problems resulting from the employment of a ClF3-HF fluorination solution in a mole ratio of approximately 0.1-2.0.

ACCESSION NUMBER BNWL-1820
TITLE Feasibility Studies for Decontamination and Densification of Chop-Leach Cladding Residues
AUTHORS Griggs, B.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE Jul 74; 54p
ISSUE N3103
NTIS PRICES NTIS Prices: PCS5.45/MFS2.25
CONTRACT/GRANT NOS. AT(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS (*Spent fuel elements; *Decladding); Decontamination; Fuel cans; Liquid wastes; Radioactive waste processing; Radioactive wastes; Reprocessing; Residues; Solid wastes; Stainless steels; Water cooled reactors; Water moderated reactors; Zircaloy
SUPPLEMENTARY TERMS NTISAEC
ABSTRACT For abstract, see NSA 31 03, number 05698.

ACCESSION NUMBER LA-UR-74-1339
TITLE Sampling of Soils for Radioactivity: Philosophy, Experience, and Results
AUTHORS Fowler, E. B.; Gilbert, R. O.; Essington, E. H.
ORGANIZATIONAL SOURCE Los Alamos Scientific Lab., N.Mex.
PAGINATION/DATE 1974; 13p
ISSUE N3102
NTIS PRICES NTIS Prices: PCS4.00/MFS2.25
REPORT NOS. CONF-740921-4
CONTRACT/GRANT NOS. W-7405-eng-36
CATEGORY CODES 8H; 68F
INDEX TERMS (*Soils; *Radiation monitoring); Decontamination; Environment; Fallout; Nevada test site; Personnel; Plutonium isotopes; Radiation accidents; Radioactive materials; Radioactivity; Radioisotopes; Radionuclide migration; Sampling
SUPPLEMENTARY TERMS NTISAEC
ABSTRACT For abstract, see NSA 31 02, number 03380.

ACCESSION NUMBER BNWL-1843
TITLE Studies on Management of Selected Wastes. Quarterly Progress Report, April--June 1974
AUTHORS Schneider, K. J.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE Jul 74; 29p
ISSUE N3102
NTIS PRICES NTIS Prices: PCS4.00/MFS2.25

CONTRACT/GRANT NOS. AT(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS (*Radioactive waste processing; *Research programs); (*Tritium; Radioactive waste processing); Decontamination; Head end processes; Pvc; Pyrolysis; Residues; Solid wastes; Spent fuel elements; Stainless steels; Transuranium elements; Zircaloy
SUPPLEMENTARY TERMS NTISAEC
ABSTRACT For abstract, see NSA 31 02, number 03041.

ACCESSION NUMBER AD/A-003 413/2SL
TITLE Source Book on Plutonium and Its Decontamination
TITLE NOTE Topical rept.
AUTHORS Cobb, F. C.; Van Hemert, R. L.
ORGANIZATIONAL SOURCE Field Command(dna) Kirtland AFB N Mex
PAGINATION/DATE 24 Sep 73; 91p
ISSUE U7505
NTIS PRICES NTIS Prices: PC$4.75/MF$2.25
SPONS. ORG. AC./NO. DNA-3272T
CATEGORY CODES 6R; 57V*; 68G*
INDEX TERMS *Plutonium; *Decontamination; *Radioactive contamination; Physical properties; Hazards; Dispersions; Standards; Radiation effects; Radiation hazards; Radiation injuries; Therapy; Chemotherapy; Lung; Mathematical models
SUPPLEMENTARY TERMS Body burdens; NTISDODAF
ABSTRACT :Contents: The plutonium hazard; Review of U.S. policy and direction concerning plutonium contamination; Physical parameters of plutonium contamination; The biology of plutonium contamination; The deposition and retention of inhaled plutonium in the human body; Foreign plutonium decontamination standards; Reduction of plutonium contamination hazard.

ACCESSION NUMBER Zaed-Bibl.-02-12
TITLE Bibliographies in Nuclear Science and Technology. Section 02: contamination and Decontamination of Foods. Number 12.
AUTHORS Fischer, E.
ORGANIZATIONAL SOURCE Bundesforschungsanstalt fuer Lebensmittelfrischhaltung, Karlsruhe (f.r. germany).
PAGINATION/DATE Jul 74; 41p
ISSUE N3011
NTIS PRICES pc $5.25/Mf $2.25
CATEGORY CODES 8H; 68F; 57H

INDEX TERMS (*food, *contamination); Bibliographies; Decontamination; Radioactivity; Radioisotopes; Radionuclide kinetics; Radionuclide migration; Removal
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 11, number 29420.

ACCESSION NUMBER Ucid-15985
TITLE Investigation of Tritium Decontamination. Interim Research Report.
AUTHORS Wethington, J. a. jr.
ORGANIZATIONAL SOURCE California Univ., Livermore Lawrence Livermore Lab.
PAGINATION/DATE 18 Jan 72; 14p
ISSUE N3011
NTIS PRICES pc $4.00/Mf $2.25
CONTRACT/GRANT NOS. At(40-1)-4201
CATEGORY CODES 18C; 77D
INDEX TERMS (*natural gas, *decontamination); (*tritium, *removal); (*nuclear explosions, *uses); Steam
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 11, number 29326.

ACCESSION NUMBER Mlm-2171(ld)
TITLE Tritium Effluent Control Project. Progress Report: april--June 1974.
AUTHORS Kershner, C. j.
ORGANIZATIONAL SOURCE Mound Lab., Miamisburg, Ohio.
PAGINATION/DATE 12 Sep 74; 20p
ISSUE N3011
NTIS PRICES pc $4.00/Mf $2.25
CONTRACT/GRANT NOS. At-33-1-Gen-53
CATEGORY CODES 7D; 99F
INDEX TERMS (*hydrogen, *separation processes); (*nitrogen, Separation processes); (*oxygen, Separation processes); Research programs; Chromatography; Gloveboxes; Low temperature; Molecular sieves, Distillation; Isotope separation; Tritium; Catalysis; Decontamination; Isotopic exchange; Water; Comparative evaluations; Organic compounds; Radioactive wastes; Tritium compounds
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 11, number 29026.

ACCESSION NUMBER Anl-8106
TITLE Chemical Engineering Division Waste Management Programs. Quarterly Report, January--March 1974.
AUTHORS Steindler, M. j.; Levitz, N. m.; Trevorrow, L. e.; Gerding, T. j.; Kullen, B. j.
ORGANIZATIONAL SOURCE Argonne National Lab., Ill.
PAGINATION/DATE May 74; 20p
ISSUE N3010
NTIS PRICES pc $4.00/Mf $2.25
CONTRACT/GRANT NOS. W-31-109-Eng-38
CATEGORY CODES 18G; 77G
INDEX TERMS (*radioactive waste management, *research programs); (*radioactive waste processing, Research programs); (*tritium, Radioactive waste processing); Decladding; Decontamination; Radioactive waste storage Reprocessin; Spent fuel elements; Zircaloy
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 10, number 26511.

ACCESSION NUMBER Ancr-1166
TITLE Decontamination and Decommissioning of the Ebr-1 Complex. Topical Report No. 1. Removal of Nak from Ebr-1 Storage Pit.
AUTHORS Commander, J. c.
ORGANIZATIONAL SOURCE Aerojet Nuclear Co., Idaho Falls, Idaho.
PAGINATION/DATE Jun 74; 13p
ISSUE N3009
NTIS PRICES pc $4.00/Mf $2.25
CONTRACT/GRANT NOS. At(10-1)-1375
CATEGORY CODES 18E; 77H
INDEX TERMS (*ebr-1 reactor, *radioactive waste disposal); Potassium alloys; Radioactive materials; Radioactive wastes; Sodium alloys
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 09, number 25889.

ACCESSION NUMBER Jaeri-M-5568
TITLE Large exp 60 Co sources Test Production with Jrr-3.
AUTHORS Tachikawa, K.; Kato, H.; Genka, T.; Ito, T.
ORGANIZATIONAL SOURCE Japan Atomic Energy Research Inst., Tokyo.
PAGINATION/DATE Feb 74; 58p
ISSUE N3008
NTIS PRICES pc $6.00/Mf $2.25
CATEGORY CODES 18B; 77B
INDEX TERMS (*cobalt 60, *isotope production); Decontamination; Gamma sources; Hot cells; Irradiation; Jrr-3 reactor; Nuclear materials

	management; Radioactive waste disposal; Radioactivity; Remote handling; Targets
SUPPLEMENTARY TERMS	Ntisaec
ABSTRACT	For abstract, see Nsa 30 08, number 20821.

ACCESSION NUMBER	Patent-3 792 154
TITLE	Removal of Iodine from Nitric Acid Solutions.
TITLE NOTE	Patent
AUTHORS	Cathers, George I.; Shipman, Calvin J.
ORGANIZATIONAL SOURCE	Atomic Energy Commission, Washington, D.c.
PAGINATION/DATE	Filed 6 Mar 72, patented 12 Feb 74; 3p
ISSUE	U7424
NTIS PRICES	not available Ntis
REPORT NOS.	Pat-Appl-231 820
CATEGORY CODES	7A; 18J; 90B; 77I
INDEX TERMS	*patents; *nitric acid; *autoclaving; *iodine 131; *decontamination; Radioactive isotopes; Dilution; Solutions; Distillation; Nuclear fuel reprocessing; Complex compounds
SUPPLEMENTARY TERMS	Pat-Cl-423-390; Ntisgpaec
ABSTRACT	The patent describes a method for removing radioactive iodine from nitric acid solution by isotopically diluting the iodine and autoclaving the solution prior to separation. Autoclaving increases the efficiency of the subsequent distillation separation.

ACCESSION NUMBER	Nico-1110
TITLE	Study for Disposal of Uranium Contaminated Ferrous Scrap.
AUTHORS	Shaw, W. e.
ORGANIZATIONAL SOURCE	National Lead Co. of Ohio, Cincinnati.
PAGINATION/DATE	25 Apr 74; 115p
ISSUE	N3006
NTIS PRICES	pc $8.75/Mf $2.25
CONTRACT/GRANT NOS.	At(30-1)-1156
CATEGORY CODES	18G; 77G
INDEX TERMS	(*gaseous diffusion process, *radioactive waste management); (*radioactive wastes, *decontamination); (*radioactive waste disposal, *underground disposal); Contamination; Iron alloys; Radioactive waste processing; Radioactivity; Smelting; Uranium; Uranium hexafluoride
SUPPLEMENTARY TERMS	Ntisaec
ABSTRACT	For abstract, see Nsa 30 06, number 16489.

ACCESSION NUMBER La-Ur-74-992
TITLE Test Methods and Efficiency Studies on Multi-Bank Hepa Filter Systems.
AUTHORS Ettinger, H. J.; Mitchell, R. n.; Gonzales, M.; DeField, J. d.; Elder, J. c.
ORGANIZATIONAL SOURCE Los Alamos Scientific Lab., N.mex.
PAGINATION/DATE 56p
ISSUE N3006
NTIS PRICES pc $6.00/Mf $2.25
REPORT NOS. Conf-740406-15
CATEGORY CODES 18F; 77F
INDEX TERMS (*air filters, *efficiency); (*plutonium, *filtration); Decontamination; Performance testing; Radioactive aerosols
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 06, number 15363.

ACCESSION NUMBER Docket-50016-228
TITLE Enrico Fermi Atomic Power Plant, Unit 1. Report for the First Quarter of 1974.
ORGANIZATIONAL SOURCE Power Reactor Development Co., Detroit, Mich.
PAGINATION/DATE 1974; 17p
ISSUE N3006
NTIS PRICES pc $4.00/Mf $2.25
CATEGORY CODES 18E; 77H
INDEX TERMS (*enrico fermi-1 reactor, *reactor dismantling); Carbon dioxide; Cleaning; Decontamination; Maintenance; Personnel; Potassium alloys; Radiation doses; Radiation protection; Sodium; Sodium alloys; Testing; Waste disposal
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 06, number 17995.

ACCESSION NUMBER Conf-740406-17
TITLE Effluent Monitoring Associated with Fluidized-Bed Waste Calciner Facility Operations.
AUTHORS Girton, R. c.; Pence, D. t.
ORGANIZATIONAL SOURCE Allied Chemical Corp., Idaho Falls, Idaho Idaho Chemical Programs - Operations Office.
PAGINATION/DATE 1974; 13p
ISSUE N3006
NTIS PRICES pc $4.00/Mf $2.25
CATEGORY CODES 18G; 77G
INDEX TERMS (*radioactive waste processing, *off-gas systems); (*ruthenium, *chemical properties); Calcination; Decontamination; Efficiency; Fluidized bed; Gaseous wastes; Radiation monitoring; Radioactive wastes

SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 06, number 15061.

ACCESSION NUMBER Ucrl-75250
TITLE Evaluation of the Resuspension Pathway Toward Protective Guidelines for Soil Contamination with Radioactivity.
AUTHORS Anspaugh, L. r.; Shinn, J. h.; Wilson, D. w.
ORGANIZATIONAL SOURCE California Univ., Livermore Lawrence Livermore Lab.
PAGINATION/DATE 17 May 74; 18p
ISSUE N3004
NTIS PRICES pc $4.00/Mf $2.25
REPORT NOS. Conf-740529-2; Sm-184/13
CATEGORY CODES 8H; 68F
INDEX TERMS (*plutonium 239, *distribution); (*soils, *surface contamination); (*radioactive aerosols, *diffusion); (*human populations, *dose commitments); Cost benefit analysis; Decontamination; Earth crust; Inhalation; Mathematical models; Radiation hazards; Radioactivity; Radionuclide kinetics; Radionuclide migration
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 04, number 09499.

ACCESSION NUMBER Kfk-1950
TITLE Report on Research and Development for the Year 1973.
ORGANIZATIONAL SOURCE Gesellschaft fuer Kernforschung m.b.H., karlsruhe (f.r. germany).
PAGINATION/DATE Feb 74; 316p
ISSUE N3004
NTIS PRICES pc $19.00/Mf $2.25
CATEGORY CODES 20H
INDEX TERMS (*nuclear physics, *research programs); (*reactors, Research programs); (*radiochemistry, Research programs); (*hot atom chemistry, Research programs); Data processing; Decontamination; Karlsruhe cyclotron; Medicine; Radiation protection; Radioisotopes; Reactor kinetics; Reactor operation
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 04, number 11586.

ACCESSION NUMBER Eur-5055
TITLE Experiences with Inspection, Maintenance, Repair Work and Decontamination in Nuclear Power Plants with Light Water Reactors.
ORGANIZATIONAL SOURCE Lahmeyer International G.m.b.H., frankfurt am Main (f.r. germany).
PAGINATION/DATE 1974; 149p
ISSUE N3004
NTIS PRICES pc $10.50/Mf $2.2
CATEGORY CODES 18E; 77H
INDEX TERMS (*bwr type reactors, *reactor maintenance); (*pwr type reactors, Reactor maintenance); Decontamination; Inspection; Radiation protection; Reactor components; Repair; Reviews
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 04, number 11796.

ACCESSION NUMBER Bnwl-1825
TITLE Studies on Management of Selected Wastes. Quarterly Progress Report, January--March 1974.
AUTHORS Schneider, K. j.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE Apr 74; 54p
ISSUE N3005
NTIS PRICES pc $4.00/Mf $2.25
CONTRACT/GRANT NOS. At(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS (*radioactive waste processing, *research programs); (*tritium, Radioactive waste processing); Decontamination; Fuel cans; Gaseous wastes; Inconel alloys; Pyrolysis; Residues; Solid wastes; Solidification; Spent fuel elements; Stainless steels; Zircaloy
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 30 05, number 12406.

ACCESSION NUMBER Jprs-62361
TITLE Radioactive Waste, Decontamination, Losses of Uranium and Plutonium
AUTHORS Rauzen, F. v.; Artemova, N. e.; Novoselov, G. n.
ORGANIZATIONAL SOURCE Joint Publications Research Service, Arlington, Va.
PAGINATION/DATE 1 Jul 74; 26p
ISSUE U7421
NTIS PRICES pc $3.25/Mf $2.25
NOTES Trans. of Atomnaya Energiya (ussr) n1 p27-37.

	69-70 Jan 74.
CATEGORY CODES	18G; 68F
INDEX TERMS	*radioactive wastes; *pollution; Radiation decontamination; Ion exchangers; Nuclear fuel elements; Plutonium; Uranium; Steels; Translations; Ussr
SUPPLEMENTARY TERMS	Ntisjprs
ABSTRACT	The report contains discussions of the use of sorption pulsation columns for decontaminating liquid radioactive wastes, methods of calculation and prediction of radioactive contamination of the ground layer of the atmosphere by discharges from pipes of atomic power plants, and losses of uranium and plutonium with steel during thermal opening of fuel elements.

ACCESSION NUMBER	Tid-3344
TITLE	Decommissioning of Nuclear Facilities: a bibliography.
ORGANIZATIONAL SOURCE	Usaec technical Information Center, Oak Ridge, Tenn.
PAGINATION/DATE	Apr 74; 11p
ISSUE	N3003
NTIS PRICES	pc $4.00/Mf $2.25
CATEGORY CODES	18I; 77H
INDEX TERMS	(*reactors, *reactor decommissioning); Decontamination; Industrial plants
SUPPLEMENTARY TERMS	Ntisaec
ABSTRACT	For abstract, see Nsa 30 03, number 08946.

ACCESSION NUMBER	Gepp-121
TITLE	Contamination Control Training Manual.
AUTHORS	Meeks, R. F.
ORGANIZATIONAL SOURCE	General Electric Co., St. Petersburg, Fla. (usa). Neutron Devices Dept.
PAGINATION/DATE	1 Apr 74; 165p
ISSUE	N3002
NTIS PRICES	pc $11.25/Mf $1.45
CONTRACT/GRANT NOS.	At(29-2)-656
CATEGORY CODES	13B; 68
INDEX TERMS	(*pollution, *control); (*environment, Contamination); (*contamination, Control); Aerosols; Alpha particles; Beta particles; Decontamination; Education; Electromagnetic radiation; Fluids; Gases; Industry; Infrared radiation; Laser radiation; Manuals; Mechanical vibrations; Microorganisms; Microwave radiation; Neutrons; Particles; Radioactivity; Radiowave radiation; Reagents; Solar radiation; Solvents; Sound waves;

	Surface air: Surface contamination: Surface waters: Thermal radiation: Ultraviolet radiation: Visible radiation
SUPPLEMENTARY TERMS	Ntisaec
ABSTRACT	For abstract, see Nsa 30 02, number 05695.

ACCESSION NUMBER	Anl-8087
TITLE	Chemical Engineering Division Waste Management Programs. Quarterly Report. October--December 1973.
AUTHORS	Steindler, M. j.: Levitz, N. m.: Trevorrow, L. e.: Gerding, T. j.: Kullen, B. j.
ORGANIZATIONAL SOURCE	Argonne National Lab., Ill. (usa).
PAGINATION/DATE	Feb 74; 44p
ISSUE	N3002
NTIS PRICES	pc $4.00/Mf $1.45
CONTRACT/GRANT NOS.	W-31-109-eng-38
CATEGORY CODES	18G; 77G
INDEX TERMS	(*radioactive waste management, *research programs): (*radioactive waste processing, *liquid wastes): (*plutonium, *removal): (*tritium, Radioactive waste processing): Decontamination: Membranes: Metals: Radioactive wastes: Reprocessing: Waste storage
SUPPLEMENTARY TERMS	Ntisaec
ABSTRACT	For abstract, see Nsa 30 02, number 02829.

ACCESSION NUMBER	Dpspu-74-30-10
TITLE	Decontamination of a Highly Radioactive Chemical Processing Facility.
AUTHORS	Moore, P. r.
ORGANIZATIONAL SOURCE	Du Pont de Nemours (e.i.) and Co., aiken, S.c. (usa). savannah River Plant.
PAGINATION/DATE	11p
ISSUE	N3001
NTIS PRICES	pc $4.00/Mf $1.45
REPORT NOS.	Conf-740406-6
CATEGORY CODES	7E; 99E
INDEX TERMS	(*fuel reprocessing plants, *decontamination): Cost: Hot cells: Planning: Savannah river plant: Spent fuels
SUPPLEMENTARY TERMS	Ntisaec
ABSTRACT	For abstract, see Nsa 30 01, number 00191.

ACCESSION NUMBER Tid-26487
TITLE Specialists Meeting of Decontamination of Plant Components from Sodium and Radioactivity, Dounreay Experimental Reactor Establishment, Thurso, Caithness, Scotland, 9--12 April 1973. Summary Report.
ORGANIZATIONAL SOURCE International Atomic Energy Agency, Vienna (austria).
PAGINATION/DATE 1973; 290p
ISSUE N2912
NTIS PRICES pc $16.50/Mf $1.45
CATEGORY CODES 7E; 99E
INDEX TERMS (*sodium, *removal); (*reactor components, *decontamination); Leading abstract; Liquid metal cooled reactors; Lmfbr type reactors; Surface cleaning
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 29 12, number 29139.

ACCESSION NUMBER Ornl-Tm-4463
TITLE High-Efficiency Particulate Air Filters: state of the Art summary Pertaining to Plutonia Aerosols.
AUTHORS Davis, W. jr.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn. (usa).
PAGINATION/DATE Apr 74; 10p
ISSUE N2912
NTIS PRICES pc $4.00/Mf $1.45
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 13A; 68A; 68F; 77G
INDEX TERMS (*air filters, *efficiency); (*radioactive aerosols; *filtration); (*plutonium, Radioactive aerosols); Air; Decontamination; Particle size; Particles; Performance testing
SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 29 12, number 29276.

ACCESSION NUMBER Aere-0-11-74
TITLE Peaceful Uses of Nuclear Explosives. Review Paper No. 1. Radioactivity and Pne.
AUTHORS Lapage, R.
ORGANIZATIONAL SOURCE Ukaea Weapons Group, Aldermaston. Atomic Weapons Research Establishment.
PAGINATION/DATE Feb 74; 114p
ISSUE N2912
NTIS PRICES pc $8.75/Mf $1.45
CATEGORY CODES 18C; 77D
INDEX TERMS (*nuclear explosions, *excavation); (*cratering explosions, *radiation hazards); (*soils, *radionuclide migration); (*rocks,

Radionuclide migration); Contained explosions; Contamination; Decontamination; Distribution; Dose limits; Earth atmosphere; Environment; Fallout; Fallout deposits; Fission products; Human populations; Plowshare project; Radiation doses; Radiation protection; Radioactivity; Reviews; Surface waters; Terrestrial ecosystems; Underground explosions

SUPPLEMENTARY TERMS Ntisaec

ABSTRACT For abstract, see Nsa 29 12, number 29262.

ACCESSION NUMBER Bnwl-1806

TITLE Studies on Management of Selected Wastes. Quarterly Progress Report, October--December 1973.

AUTHORS Schneider, K. j.

ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash. (usa).

PAGINATION/DATE Jan 74; 39p

ISSUE N2910

NTIS PRICES pc $4.00/Mf $1.45

CONTRACT/GRANT NOS. At(45-1)-1830

CATEGORY CODES 18G; 77G

INDEX TERMS (*radioactive waste processing, *research programs); (*tritium, Radioactive waste processing); Decontamination; Fuel cans; Pyrolysis; Separation processes; Solid wastes; Transuranium elements

SUPPLEMENTARY TERMS Ntisaec

ABSTRACT For abstract, see Nsa 29 10, number 24090.

ACCESSION NUMBER Anl-8061

TITLE Chemical Engineering Division Waste Management Programs. Quarterly Report, July--September 1973.

AUTHORS Steindler, M. j.; Levitz, N. m.; Trevorrow, L. e.; Gerding, T. j.; Kullen, B. j.

ORGANIZATIONAL SOURCE Argonne National Lab., Ill. (usa).

PAGINATION/DATE Jan 74; 28p

ISSUE N2910

NTIS PRICES pc $4.00/Mf $1.45

CONTRACT/GRANT NOS. W-31-109-eng-38

CATEGORY CODES 18G; 77G

INDEX TERMS (*radioactive waste management, *research programs); (*radioactive waste processing, Research programs); (*tritium, Radioactive waste processing); Decladding; Decontamination; Fission products; Rare gases; Reprocessing; Spent fuel elements; Waste storage; Zircaloy

SUPPLEMENTARY TERMS Ntisaec
ABSTRACT For abstract, see Nsa 29 10, number 24089.

ACCESSION NUMBER Hw-70806-Rd
TITLE Chemical Effluents Technology Waste Disposal Investigations, January--June 1961.
AUTHORS Haney, W. a.
ORGANIZATIONAL SOURCE General Electric Co., richland, Wash. (usa). hanford Atomic Products Operation.
PAGINATION/DATE 28 Aug 61; 21p
ISSUE N2908
NTIS PRICES pc $3.25/Mf $1.45
CONTRACT/GRANT NOS. At(45-1)-1350
CATEGORY CODES 18G; 77G
INDEX TERMS (*hapo, Radioactive waste disposal); (*ground water, *radiation monitoring); (*beta sources, Radiation monitoring); (*radioactive waste disposal, *underground disposal); Cesium 137; Containers; Contamination; Decontamination; Fission products; Leaks; Plutonium; Radioactive waste processing; Reactor accidents
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 29 08, number 19020.

ACCESSION NUMBER Docket-50259-316
TITLE Browns Ferry Nuclear Power Station, Unit 1. Abnormal Occurrence Report Bfao-746W: radioactive Material Was Released to the Unit 2 Reactor Building Floor Drain Sumps.
ORGANIZATIONAL SOURCE Tennessee Valley Authority, Chattanooga (usa).
PAGINATION/DATE 30 Jan 74; 3p
ISSUE N2908
NTIS PRICES pc $3.00/Mf $1.45
CATEGORY CODES 18E; 77H
INDEX TERMS (*browns ferry-1 reactor, *radioactive wastes); Chromium 51; Cobalt 58; Cobalt 60; Decontamination; Leaks; Pumps; Reactor cooling systems; Tanks; Valves
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 29 08, number 20362.

ACCESSION NUMBER Bnwl-1776
TITLE Feasibility Evaluation and R and D program Plan for Transuranic Partitioning of High-Level Fuel Reprocessing Waste.
AUTHORS Bray, L. a.; Burger, L. l.; Burns, R. e.; Ryan, J. l.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash. (usa).
PAGINATION/DATE Nov 73; 79p
ISSUE N2906
NTIS PRICES pc $5.45/Mf $1.45
CONTRACT/GRANT NOS. At(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS (*radioactive waste processing, *research programs); Actinides; Comparative evaluations; Cost; Decontamination; Iodine; Ion exchange; Nickel; Partition; Radiation hazards; Radioactive wastes; Samarium; Separation processes; Solvent extraction; Technetium; Tin; Toxicity; Waste storage
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 29 06, number 12638.

ACCESSION NUMBER Ornl-4792
TITLE Use of Ion Exchange for the Treatment of Liquids in Nuclear Power Plants.
AUTHORS Lin, K. h.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn. (usa).
PAGINATION/DATE Dec 73; 108p
ISSUE N2905
NTIS PRICES pc $5.45/Mf $1.45
CONTRACT/GRANT NOS. W-7405-eng-26
CATEGORY CODES 18G; 77G
INDEX TERMS (*radioactive waste processing, *ion exchange); Coolants; Decontamination; Liquid wastes; Nuclear power plants; Radioactive wastes; Resins
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 29 05, number 09982.

ACCESSION NUMBER Arh-1972
TITLE Radioactive Effluent Reduction from 200 Area Facilities.
AUTHORS Hanson, G. l.
ORGANIZATIONAL SOURCE Atlantic Richfield Hanford Co., richland, Wash. (usa).
PAGINATION/DATE 29 Jan 71; 28p
ISSUE N2905
NTIS PRICES pc $3.50/Mf $1.45
CATEGORY CODES 8H; 68F

INDEX TERMS (*hapo, *waste management); (*fuel reprocessing plants, Waste management); (*radioactive wastes, Waste management); (*nonradioactive wastes, Waste management); Cesium 137; Condensates; Coolants; Decontamination; Fission products; Gaseous wastes; Iodine 131; Liquid wastes; Nitrogen oxides Plutonium 239; Radiation monitoring; Radioactive waste disposal; Radioactive waste processing; Radioactivity; Soils; Stack disposal; Strontium 90; Uranium trioxide; Vapor condensation; Water

SUPPLEMENTARY TERMS Aec

ABSTRACT For abstract, see Nsa 29 05, number 10120.

ACCESSION NUMBER Aed-C-13-9

TITLE Bibliographies in Nuclear Science and Technology. Section 13: decontamination.

AUTHORS Philipp, H.; Wichmann, E.

ORGANIZATIONAL SOURCE Zentralstelle fuer Atomkernenergie-Dokumentation, Leopoldshafen (f.r. germany).

PAGINATION/DATE Sep 73; 39p

ISSUE N2904

NTIS PRICES pc $4.00/Mf $1.45

CATEGORY CODES 6R

INDEX TERMS (*decontamination, *bibliographies); Animals; Buildings; Gases; Liquids; Man

SUPPLEMENTARY TERMS Aec

ABSTRACT For abstract, see Nsa 29 04, number 07602.

ACCESSION NUMBER Ornl-4790

TITLE Use of Evaporation for the Treatment of Liquids in the Nuclear Industry.

AUTHORS Godbee, H. w.

ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.

PAGINATION/DATE Sep 73; 100p

ISSUE N2811

NTIS PRICES pc $5.45/Mf $1.45

CONTRACT/GRANT NOS. W-7405-eng-26

CATEGORY CODES 18G; 77G

INDEX TERMS (*radioactive waste processing, *evaporation); (*ruthenium, Radioactive waste processing); (*iodine, Radioactive waste processing); Decontamination; Design; Evaporators; Liquid wastes; Nuclear power plants; Operation; Performance; Radioactive wastes

SUPPLEMENTARY TERMS Aec

ABSTRACT For abstract, see Nsa 28 11, number 27131.

ACCESSION NUMBER Eur-4906
TITLE Practice of Public Control on the Observance of Exemption for Nuclear Fuels and Other Radioactive Materials in the Member Countries of the European Communities.
AUTHORS Bischof, W.; Pelzer, N.
ORGANIZATIONAL SOURCE Goettingen Univ. (west Germany). Institut fuer Voelkerrecht.
PAGINATION/DATE Apr 73; 451p
ISSUE N2809
NTIS PRICES pc $24.75/Mf $1.45
CATEGORY CODES 18U; 77I
INDEX TERMS (*european communities, *atomic energy laws); (*radioisotopes, Atomic energy laws); (*fissionable materials, Atomic energy laws); Decontamination; Irradiation devices; Maximum acceptable contamination; Nuclear power plants; Power reactors; Radioactive waste disposal; Radioactive waste processing; Radioactive wastes; Safeguard regulations; Safety standards; Transport regulations
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 09, number 23873.

ACCESSION NUMBER Bnwl-Cc-1352
TITLE Ground Disposal of Reactor Coolant Effluent.
AUTHORS Eliason, J. R.; Hajek, B. F.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE 19 Sep 67; 19p
ISSUE N2809
NTIS PRICES pc $3.00/Mf $1.45
CONTRACT/GRANT NOS. At(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS (*coolants, *underground disposal); (*liquid wastes, Underground disposal); (*ground water, *flow rate); Contamination; Decontamination; Filtration; Heating; Levels; Radioactive wastes; Reactor cooling systems; Soils
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 09, number 22127.

ACCESSION NUMBER Bnwl-B-277
TITLE High Temperature Methods for Disposal of Contaminated Metal Equipment.
AUTHORS Fullam, H. t.
ORGANIZATIONAL SOURCE Battelle Pacific Northwest Labs., Richland, Wash.
PAGINATION/DATE Jul 73; 47p
ISSUE N2309
NTIS PRICES pc $4.50/Mf $1.45
CONTRACT/GRANT NOS. At(45-1)-2130
CATEGORY CODES 18G; 77G
INDEX TERMS (*stainless steels, *decontamination); (*radioactive waste processing, *metals); Melting; Radioactive waste disposal; Very high temperature; Slags; Molten salts; Sodium nitrates; Inert atmosphere
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 09, number 20860.

ACCESSION NUMBER Bmft-Fbk-73-13
TITLE Studies on the Decontamination of Radioactive Water by Precipitation of Soaps.
AUTHORS Deuber, H.; von Erichsen, L.
ORGANIZATIONAL SOURCE Bonn Univ. (west Germany). Institut fuer Physikalische Chemie.
PAGINATION/DATE Jun 73; 145p
ISSUE N2810
NTIS PRICES pc $9.25/Mf $1.45
CATEGORY CODES 18G
INDEX TERMS (*radioactive wastes, *decontamination); Aqueous solutions; Efficiency; Liquid wastes; Precipitation; Radioactive waste processing; Soaps
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 23 10, number 24364.

ACCESSION NUMBER Bmft-Fbk-73-11
TITLE Decontamination of Reactor Components. Subproject 2. Study on the Possibilities of Automizing the Determination of Fission and Corrosion Products in the Cooling Circuits of Nuclear Reactors.
AUTHORS Neeb, K. h.
ORGANIZATIONAL SOURCE Siemens a.G., erlangen (west Germany).
PAGINATION/DATE May 73; 67p
ISSUE N2809
NTIS PRICES pc $5.50/Mf $1.45
CATEGORY CODES 18G
INDEX TERMS (*computer codes, *a codes); (*reactor components, *decontamination); (*fission

products, *on-line measurement systems); (*corrosion products, On-line measurement systems); Automation; Gamma spectra; Li-drifted ge detectors; Peaks; Radioactivity
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 09, number 23651.

ACCESSION NUMBER Bmft-Fbk-73-10
TITLE Investigations Concerning the Purification of Spent Fuel Pit Water During Refuelling at the Nuclear Power Plant Obrigheim.
AUTHORS Wille, H.; Stoeckert, H.
ORGANIZATIONAL SOURCE Siemens a.G., erlangen (west Germany).
PAGINATION/DATE May 73; 28p
ISSUE N2809
NTIS PRICES pc $3.50/Mf $1.45
CATEGORY CODES 18I
INDEX TERMS (*obrigheim reactor, *filters); Cesium 137; Chromium 51; Cobalt 58; Cobalt 60; Decontamination; Efficiency; Iodine 131; Performance; Spent fuel storage; Water
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 09, number 23390.

ACCESSION NUMBER Aecl-4504
TITLE Symptoms and Recognition of Water Treatment Problems in Thermal and Nuclear Power Stations: control of Radioactive Build-Up.
AUTHORS Hemmings, R. I.
ORGANIZATIONAL SOURCE Atomic Energy of Canada Ltd., sheridan Park (ontario).
PAGINATION/DATE Apr 73; 8p
ISSUE N2809
NTIS PRICES pc $3.00/Mf $1.45
CATEGORY CODES 18I; 77H
INDEX TERMS (*water cooled reactors, *radiation protection); (*reactor cooling systems, *decontamination); Contamination; Corrosion; Fission products; Pipelines; Power reactors; Radioactivity; Water
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 09, number 23576.

ACCESSION NUMBER Rfp-Trans-134
TITLE Intervention in a High-Activity Cell by Means of a Heavy-Duty Remote-Control Manipulator.
AUTHORS Calame-Longjean, A.
PAGINATION/DATE 1955; 13p
ISSUE N2808
NTIS PRICES pc $3.00/Mf $1.45
CATEGORY CODES 18I; 77H
INDEX TERMS (*hot cells, *decontamination); (*remote handling equipment, *maintenance); Fuel elements; Radioactivity; Reprocessing; Safety
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 08, number 18926.

ACCESSION NUMBER Jul-925-Ct
TITLE Purification of Burner off-Gases During Reprocessing of Irradiated Htr Fuel Elements.
AUTHORS Beaujean, H.; Filss, P.; Grahmann, U.; Laser, M.; Merz, E.
ORGANIZATIONAL SOURCE Kernforschungsanlage, Juelich (west Germany).
PAGINATION/DATE Feb 73; 106p
ISSUE N2808
NTIS PRICES pc $7.50/Mf $1.45
CATEGORY CODES 18J
INDEX TERMS (*spent fuel elements, *reprocessing); (*radioactive waste processing, *gaseous wastes); (*cesium isotopes, Gaseous wastes); (*zirconium isotopes, Gaseous wastes); Aerosols; Carbon 14; Decontamination; Gases; Krypton 85; Molecular sieves; Purification; Silica gel; Thorium carbides; Thorium oxides; Tritium; Uranium carbides; Uranium dioxide
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 08, number 18085.

ACCESSION NUMBER Eur-4981
TITLE Radioactive Pollution: Its Elimination. Part Ii. radioactive Wastes Processing Plants.
AUTHORS Mosselmans, G.; Vaccarezza, J.
ORGANIZATIONAL SOURCE European Atomic Energy Community, Ispra (italy). Joint Nuclear Research Center.
PAGINATION/DATE Jun 73; 27p
ISSUE N2808
NTIS PRICES pc $3.50/Mf $1.45
CATEGORY CODES 18G
INDEX TERMS Decontamination; Liquid wastes; Radioactive waste processing; Solid wastes; Waste storage
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 08, number 18062.

ACCESSION NUMBER Dun-7777-8
TITLE System Action Plan, System No. 08: chemical Decontamination.
AUTHORS Kratzer, W. k.
ORGANIZATIONAL SOURCE United Nuclear Industries, Inc., Richland, Wash. (usa).
PAGINATION/DATE 20 Dec 71; 18p
ISSUE N2808
NTIS PRICES pc $3.00/Mf $1.45
CONTRACT/GRANT NOS. At(45-1)-1857
CATEGORY CODES 18I; 77H
INDEX TERMS (*n-reactor, *decontamination); Cost; Radioactive waste disposal; Reactor maintenance; Reactor operation
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 08, number 20332.

ACCESSION NUMBER Aec-tr-7433
TITLE Flocculation and Sedimentation of Suspended Radioactive Contaminants in Waste Water by Control of the zeta Potential.
AUTHORS Johannsen, K. h.
ORGANIZATIONAL SOURCE Staatliche Zentrale fuer Strahlenschutz, Berlin (east Germany).
PAGINATION/DATE 15p
ISSUE N2806
NTIS PRICES pc $4.00/Mf $1.45
CATEGORY CODES 18G; 77G; 68F
INDEX TERMS (*water, *decontamination); (*radioactive waste processing, *flocculation); Aluminium sulfates; Aqueous solutions; Colloids; Electric potential; Liquid wastes; Organic polymers; Sedimentation; Suspensions
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 28 06, number 12763.

ACCESSION NUMBER Nvo-129
TITLE Cleanup Summary Report: tatum Dome Test Site, Mississippi.
ORGANIZATIONAL SOURCE Nevada Operations Office (aec), las Vegas.
PAGINATION/DATE Apr 73; 53p
ISSUE N2802
NTIS PRICES pc $4.75/Mf $1.45
CATEGORY CODES 8H; 77G
INDEX TERMS (*sterling event, *contamination); (*surface waters, *decontamination); (*ground water, Decontamination); (*soils, Decontamination); Contained explosions; Mississippi; Nuclear explosions; Radiation monitoring; Radioactive waste disposal; Salmon event; Underground

	explosions
SUPPLEMENTARY TERMS	Aec
ABSTRACT	For abstract, see Nsa 28 02, number 02611.

ACCESSION NUMBER	Frnc-Conf-33
TITLE	Radioactive Waste Decontamination.
AUTHORS	Blum, J. m.; Jaumier, J. j.; Verot, J. l.
ORGANIZATIONAL SOURCE	Pechiney Ugine Kuhlmann, Paris (france).
PAGINATION/DATE	1972; 5p
ISSUE	N2803
NTIS PRICES	pc $3.00/Mf $1.45
REPORT NOS.	Conf-720454-2
CATEGORY CODES	18G; 77G
INDEX TERMS	(*radioactive waste processing, *liquid wastes); (*ruthenium, *separation processes); Adsorption; Decontamination; Iron; Precipitation; Ruthenium 106; Cesium 137; Ion exchange; Spent fuel storage; Water; Zeolites
SUPPLEMENTARY TERMS	Aec
ABSTRACT	For abstract, see Nsa 28 03, number 05409.

ACCESSION NUMBER	Eur-4937
TITLE	Radioactive Pollution: its Elimination.
AUTHORS	Vaccarezza, J.
ORGANIZATIONAL SOURCE	European Atomic Energy Community, Ispra (italy). Joint Nuclear Research Center.
PAGINATION/DATE	Apr 73; 89p
ISSUE	N2803
NTIS PRICES	pc $6.50/Mf $1.45
CATEGORY CODES	18H
INDEX TERMS	(*radioisotopes, *radiochemical analysis); (*radioactive waste processing, *reviews); (*radioactive wastes, Reviews); (*contamination, Reviews); Chemical analysis; Decontamination; Ore concentrates; Radioactivity
SUPPLEMENTARY TERMS	Aec
ABSTRACT	For abstract, see Nsa 28 03, number 05528.

ACCESSION NUMBER	Eur-4937
TITLE	Radioactive Pollution: its Elimination.
AUTHORS	Vaccarezza, J.
ORGANIZATIONAL SOURCE	European Atomic Energy Community, Ispra (italy). Joint Nuclear Research Center.
PAGINATION/DATE	Apr 73; 91p
ISSUE	N2801
NTIS PRICES	pc $6.75/Mf $1.45
CATEGORY CODES	18H; 77G
INDEX TERMS	(*radioisotopes, *quantitative chemical

	analysis); (*radioactive waste processing, *reviews); Bibliographies; Contamination; Decontamination; Liquid wastes; Radioactive waste disposal; Radioactive wastes
SUPPLEMENTARY TERMS	Aec
ABSTRACT	For abstract, see Nsa 28 01, number 00361.

ACCESSION NUMBER	Patent-3 703 208
TITLE	Reduction of Radioactive Gas Contamination of Nuclear Detonations in Geological Formations.
TITLE NOTE	Patent
AUTHORS	Heckman, Richard A. Cowles, John O.
ORGANIZATIONAL SOURCE	Atomic Energy Commission, Washington, D.C.
PAGINATION/DATE	Filed 22 Jan 71, patented 21 Nov 72; 7p
ISSUE	U7318
NTIS PRICES	not available Ntis
REPORT NOS.	Pat-Appl-108 976
CATEGORY CODES	18G; 77G; 90
INDEX TERMS	(*radiation decontamination, *patents); Underground explosions; Nuclear explosions; Oxidizers; Tritium
SUPPLEMENTARY TERMS	Pat-Cl-166-247; Gpaec
ABSTRACT	The patent relates, generally, to procedures for reducing radioactive contamination of fluid and gaseous materials by underground nuclear detonations and, more particularly, to a procedure for minimizing contamination of fluid and gaseous hydrocarbons by tritium produced incident to detonation of a nuclear explosive in a petroliferous formation.

ACCESSION NUMBER	Ad-761 950
TITLE	Air Pollution.
TITLE NOTE	Report bibliography Feb 59-Dec 72.
ORGANIZATIONAL SOURCE	Defense Documentation Center Alexandria Va
PAGINATION/DATE	Jun 73; 353p
ISSUE	U7315
NTIS PRICES	pc $9.00/Mf $0.95
NOTES	Updates report dated Oct 68, Ad-679 210.
REPORT NOS.	Ddc-Tas-73-27
CATEGORY CODES	13B; 68A
INDEX TERMS	(*air pollution, *bibliographies); Waste gases; Exhaust gases; Confined environments; Chemical warfare agents; Contamination; Purification; Radiological contamination; Radioactive fallout, Wastes(industrial); Biological warfare agents; Dust; Particles; Smokes; Decontamination
SUPPLEMENTARY TERMS	Combustion products; Airborne wastes; Industrial wastes; Air pollution control equipment; Sd

ABSTRACT

The bibliography comprises citations of unclassified and unlimited reports covering Air Pollution, from both natural and man-made sources. References primarily deal with causes of pollution, their detection, control, treatment and elimination. Corporate Author-Monitoring Agency, Subject, Title, and Personal Author Indexes are included. Portions of this document are not fully legible.

ACCESSION NUMBER Szs-143
TITLE (radioactive Wastes and Decontamination).
TITLE ANNOTATION (radioactive Wastes and Decontamination)
ORGANIZATIONAL SOURCE Staatliche Zentrale Fuer Strahlenschutz, Berlin (East Germany).
PAGINATION/DATE Sep 72; 31p
ISSUE N2710
NTIS PRICES pc $3.00/Mf $0.9
NOTES Lang- In German.
CATEGORY CODES 18G
INDEX TERMS *decontamination; *dicactive waste
SUPPLEMENTARY TERMS Aec
ABSTRACT For abstract, see Nsa 27 10, number 22310.

ACCESSION NUMBER Pb-217 189
TITLE Preliminary Reports of Progress - Laboratory Studies. Water Decontamination. III. studies on Ce144, Y91, and I131
AUTHORS Straub, Conrad P.; Brockett, T. w. Jr; Stepp, Robert
ORGANIZATIONAL SOURCE Robert A. taft Sanitary Engineering Center, Cincinnati, Ohio.
PAGINATION/DATE 3 May 51; 14p
ISSUE E7301
NTIS PRICES pc $3.00/Mf $0.95
CATEGORY CODES 13B; 18H; 60I; 68F
INDEX TERMS (*water treatment, *radioactive contaminants); (*chemical removal(water treatment), *radioactive isotopes)
SUPPLEMENTARY TERMS Epal
ABSTRACT

Radiochemical analyses of the effluent obtained from the alum treatment of a simulated nuclear bomb blast mixture in an experimental water treatment plant showed that radioelements were removed in varying amounts. These data also indicated higher and lower removals than those that had been reported earlier when only single radioisotopes were subjected to similar treatment processes. Thus a series of jar

test studies were made in which single isotopes and mixtures of isotopes were subjected to similar treatment processes to obtain data on removals. Such studies would show whether certain radioisotopes would be more easily removed when combined with other isotopes or whether such combinations would interfere with removals of the specific isotopes. (author Modified Abstract)

ACCESSION NUMBER Pb-216 731
TITLE Water Decontamination
AUTHORS Straub, Conrad P.
ORGANIZATIONAL SOURCE Robert A. taft Sanitary Engineering Center, Cincinnati, Ohio.
PAGINATION/DATE 1955; 40p
ISSUE E7301
NTIS PRICES pc $4.00/Mf $0.95
CATEGORY CODES 13B; 68F; 60I
INDEX TERMS (*water pollution, *radioactive contaminants)
SUPPLEMENTARY TERMS Epal
ABSTRACT Although radioactivity has been known since 1896 when Bequerel first observed the phenomenon by its effect on photographic plate, it has been of little concern or interest to the sanitary engineering profession until recent times -- during the last decade in particular. Our interest and concern stems from the fact that large quantities of radioactive materials are produced during fission of certain naturally occurring heavy radioactive materials in nuclear reactors or piles. The report presents a discussion and recommendations for the decontamination of water from radioactive contaminants. (author Modified Abstract)

ACCESSION NUMBER Pb-215 400
TITLE Interim Progress Report on the Decontamination of Radioactive Waters
AUTHORS Morton, Roy J.; Straub, Conrad P.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE May 53; 133p
ISSUE E7301
NTIS PRICES pc $8.75/Mf $0.95
CATEGORY CODES 13B; 18H; 68F; 68D
INDEX TERMS (*water pollution, *radioactive contaminants); Accumulation; Residues; Radiation measuring instruments
SUPPLEMENTARY TERMS *water pollution control; Epal
ABSTRACT The report includes a short summary entitled

Conclusions Based Upon the Interim Progress Report on the Decontamination of Radioactive Waters. The detailed report which follows the summary covers the following subjects: research on the decontamination of radioactive waters, the problem of radioactivity in water courses, concentration of radioactivity by natural agents, water decontamination, and instrumentation. (author)

ACCESSION NUMBER	Szs-141
TITLE	(radioactive Waste Decontamination Processes).
TITLE ANNOTATION	(radioactive Waste Decontamination Processes)
ORGANIZATIONAL SOURCE	Staatliche Zentrale Fuer Strahlenschutz, Berlin /sup 8/east Germany/sup 9/.
PAGINATION/DATE	Sep 72; 36p
ISSUE	N2708
NTIS PRICES	pc $3.00/Mf $0.95
NOTES	Lang- In German.
CATEGORY CODES	16G; 77G
INDEX TERMS	*radioactive waste
SUPPLEMENTARY TERMS	Aec
ABSTRACT	For abstract, see Nsa 27 08, number 17135.

ACCESSION NUMBER	Jul-867-De
TITLE	Experimental Determination of the Efficiency of an Ion Exchange Complete Salt Equipment for the Decontamination of Radioactive Waste and the Evaluation of the Economy.
AUTHORS	Dobrevsky, I.; Stipanits, P.; Zange, E.; Mallek, H.; Jablonski, W.
ORGANIZATIONAL SOURCE	Kernforschungsanlage, Juelich (West Germany). Abt. Dekontamination.
PAGINATION/DATE	Jun 72; 66p
ISSUE	N2708
NTIS PRICES	pc $3.00/Mf $0.95
NOTES	Lang- In German. U. s. sales only
CATEGORY CODES	18G; 77G
INDEX TERMS	*radioactive waste
SUPPLEMENTARY TERMS	Aec
ABSTRACT	For abstract, see Nsa 27 08, number 17134.

ACCESSION NUMBER Oro-4201-2
TITLE An Investigation of Tritium Decontamination. Final Report.
TITLE ANNOTATION An Investigation of Tritium Decontamination. Final Report
AUTHORS Wethington Jr. J. A.
ORGANIZATIONAL SOURCE Florida Univ., Gainesville. California Univ., Livermore. Lawrence Livermore Lab.
PAGINATION/DATE 1972; 32p
ISSUE N2704
NTIS PRICES pc $3.00/Mf $0.95
CONTRACT/GRANT NOS. At(40-1)-4201
CATEGORY CODES 18C; 77D
INDEX TERMS *ground waters; *natural gas; *nuclear explosions/ underground; *tritium
ABSTRACT For abstract, see Nsa 27 04, number 07542.

ACCESSION NUMBER Ujv-2345-Ch
TITLE Development of Convenient Selective Sorbents and of an Optimized Contactor for the Decontamination of Radioactive Waters. II. Design of a Clarifier-Contactor to Separate the Sludge.
TITLE ANNOTATION Development of Convenient Selective Sorbents and of an Optimized Contactor for Decontamination of Radioactive Waters. II
AUTHORS Napravnik, J.; Verner, M.
ORGANIZATIONAL SOURCE Ceskoslovenska Akademie Ved, Rez. Ustav Jaderneho Vyzkumu.
PAGINATION/DATE 23p
ISSUE N2702
NTIS PRICES pc $3.00/Mf $0.95
NOTES Lang- In Czech. U. s. sales only
CATEGORY CODES 18G; 77G
INDEX TERMS *cesium isotopes cs-137; *iodine isotopes i-131; *radioactive waste; *strontium isotopes sr-9
ABSTRACT For abstract, see Nsa 27 02, number 02461.

ACCESSION NUMBER Kfk-1500
TITLE Decontamination Operations Department Annual Report, 1970.; Krause, H.
TITLE ANNOTATION Prog. Rpt. Of Decontamination Operations Department, Annual, 1970
ORGANIZATIONAL SOURCE Kernforschungszentrum, Karlsruhe (West Germany).
PAGINATION/DATE Jun 72; 137p
ISSUE N2624
NTIS PRICES pc $3.00/Mf $0.95
NOTES Lang- In German. U. s. sales only

CATEGORY CODES 18G; 77G
INDEX TERMS *bituminous materials; *cements; *decontamination; *fission products; *metals; *nitric acid; *phosphoric acid/ tributyl ester; *radioactive waste; *salt deposits
ABSTRACT For abstract, see Nsa 26 24, number 58659.

ACCESSION NUMBER Szs-129
TITLE Application of Organic Flocculants to the Decontamination of Radioactively Contaminated Waters by Coagulation.
AUTHORS Vostrcil, J.
ORGANIZATIONAL SOURCE Staatliche Zentrale Fuer Strahlenschutz, Berlin (East Germany).
PAGINATION/DATE Apr 72; 60p
ISSUE N2622
NTIS PRICES pc $3.00/Mf $0.95
NOTES Lang- In German. U. s. sales only
CATEGORY CODES 18G; 77G
INDEX TERMS * Coagulation; *water
ABSTRACT For abstract, see Nsa 26 22, number 53040.

ACCESSION NUMBER Conf-720923-14
TITLE Estimate of the Process Decontamination Factors Required to Meet Federal Effluent Regulations for the Burning of Htgr Fuel Elements.
TITLE ANNOTATION Estimate of the Process Decontamination Factors Required to Meet Federal Effluent Regulations for the Burning of Htgr Fuel Elements.
AUTHORS Snider, J. W.; Leuze, R. E.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE 1972; 26p
ISSUE N2622
NTIS PRICES pc $3.00/Mf $0.95
NOTES From 12. Air Cleaning Conference- Oak Ridge, Tn. (28 Aug 1972).
CATEGORY CODES 18G; 77G; 68A
INDEX TERMS *plutonium isotopes pu- 8; *radioactive waste; *reactor fuels; *reactors/ gas-cooled
ABSTRACT For abstract, see Nsa 26 22, number 53060.

ACCESSION NUMBER Conf-720823-12
TITLE Decontamination of Htgr Reprocessing off-Gases.
TITLE ANNOTATION Decontamination of Htgr Reprocessing off-Gases
AUTHORS Whatley, M. E.; Glass, R. W.; Haas, P. A.; Meservey, A. B.; Notz, K. J.
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE 1972; 22p
ISSUE N2622
NTIS PRICES pc $3.00/Mf $0.95
NOTES From 12. Air Cleaning Conference- Oak Ridge, Tn. (28 Aug 1972).
CATEGORY CODES 18G; 77G
INDEX TERMS *carbon dioxides; *fission products; *krypton; *radioactive waste; *reactor fuels
ABSTRACT For abstract, see Nsa 26 22, number 53059.

ACCESSION NUMBER Ad-751 683
TITLE Military Engineers and Chemical Warfare Troops (Inzhenernye Voiska Khimicheskie Voiska) (TRANSLATION)
AUTHORS Aleksandrov, I. F.
ORGANIZATIONAL SOURCE Army Foreign Science and Technology Center Charlottesville Va
PAGINATION/DATE 15 Aug 72; 26p
ISSUE U7301
NTIS PRICES pc $3.00/Mf $0.95
NOTES Trans. of mono. Posobie dlya Ofitserov Zapasa Motostrelkovykh i Tankovykh Voisk (handbook for Officers of the Reserve of Motor Rifle and Tank Troops) moscow, 1971.
REPORT NOS. Fstc-Ht-23-70-73
PROJECT NOS. Fstc-T7023012301
CATEGORY CODES 5I; 5A; 74F
INDEX TERMS (*armed Forces(foreign), *military organizations); Military engineering; Reviews; Infantry; Amphibious operations; Minelaying; Armored vehicles; Nuclear radiation; Dosimeters; Chemical warfare; Protective clothing; Decontamination; Health physics
SUPPLEMENTARY TERMS Translations; Pontoon bridges; *military engineers; *chemical warfare troops
ABSTRACT The tasks in support of combat operations is as follows: reconnaissance of the enemy and his positions; camouflage of command posts and targets in the rear; preparation and maintenance of routes for the movement of troops; the opening of passages over obstacles; mine clearing; the installation and maintenance of crossings over water obstacles; the building of defences and

carrying out demolition: conduct of engineering measures to eliminate the after effects of a nuclear attack by the enemy. Chemical warfare troops are classified as specialized troops: The equipment of these troops includes equipment for conducting radiation reconnaissance and monitoring radiation exposure of personnel. (author)

ACCESSION NUMBER	Pb-210 606
TITLE	Special Study of the Carriage of Radioactive Materials by Air.
TITLE NOTE	Special study rept.
ORGANIZATIONAL SOURCE	National Transportation Safety Board. Washington. D.C.
PAGINATION/DATE	26 Apr 72: 94p
ISSUE	U7216
NTIS PRICES	pc $3.00/Mf $0.95
REPORT NOS.	Ntsb-Aas-72-4
CATEGORY CODES	18F: 13L: 77F
INDEX TERMS	(*radioactive materials. Air transportation): (*accident investigations. Radioactive materials): Radioactive decontamination: Radiation shielding: Safety engineering: Government policies: Transport planes
SUPPLEMENTARY TERMS	Convair 880 aircraft
ABSTRACT	The National Transportation Safety Board initiated this study in order to investigate a radioactive contamination incident involving a U.S. air carrier and to investigate all aspects of the air shipment of radioactive materials. The Safety Board's study led it to the conclusion that, at the present time, the radioactive materials carried by air do not normally constitute any unusual risk of life to the public. Nevertheless, as the government relinquishes more of its activities to private industry and as the nuclear industry continues its phenomenal growth, the proliferation of the system presents new demands for vigilance if the current minimal risk to the public is not to rise. Accordingly, the Board's primary concern is not the risks engendered by present operations, but rather, it is the risk potential created by the rapid expansion of the nuclear industry. (author)

ACCESSION NUMBER Aed-c-13-8
TITLE Bibliographies in Nuclear Science and Technology. Section 13. Decontamination.
TITLE ANNOTATION Bibliographies in Nuclear Science and Technology. Section 13. Decontamination
AUTHORS Philipp, Hermann; Wichmann, Erich
ORGANIZATIONAL SOURCE Zentralstelle Fuer Atomkernenergie-Dokumentation, Frankfurt Am Main (West Germany).
PAGINATION/DATE Dec 71; 42p
ISSUE N2613
NTIS PRICES pc $3.00/Mf $0.95
NOTES Lang- In Several Languages. U. s. sales only
CATEGORY CODES 18G; 77F
INDEX TERMS *bibliographies; *decontamination
ABSTRACT For abstract, see Nsa 26 13, number 30853.

ACCESSION NUMBER Tt-70-55104/3-4
TITLE Nukleonika. Volume 16, Number 3-4 1971.
ORGANIZATIONAL SOURCE Atomic Energy Commission, Washington, D.c.
PAGINATION/DATE 1972; 92p
ISSUE U7212
NTIS PRICES pc $4.85
NOTES The above journal is translated on a regular basis. Sponsored in part by National Science Foundation, Washington, D. c. special Foreign Currency Science Information Program.
REPORT NOS. Aectr-7223/3-4
CATEGORY CODES 14B; 7E; 6R; 59; 77; 57V
INDEX TERMS (*nuclear chemistry, *periodicals); (*poland, Nuclear chemistry); Lead isotopes; Nuclear energy levels; Molybdates; Labeled substances; Radiolysis; Radioactive waste processing; Signal generators; Ethylene; Tracer studies; Evaporation; Radiation decontamination; Radon, Mines(excavations); Translations
SUPPLEMENTARY TERMS Purex process; Buthyl phosphates; Mine safety
ABSTRACT Contents: the level structure of the nuclei near 208Pb with doubly filled shells of Z = 82, N = 126; Radioisotopic exchange of ligands in chloro- and thiocyanatomolybdates(iii); the radiolysis of diluent-Tbp-Hno3 systems; Effect of some oxygen containing compounds on the radiolysis of gaseous ethylene; Application of the tracer method in investigations of evaporation phenomena in power boilers; Time-to-pulse height converter; Cleansing of skin contaminated with radionuclides; Determination of RaB and RaC beta-radiation for calculations of the potential

alpha-radiation energy of 222Rn decay products in the air of mines.

ACCESSION NUMBER Kfk-1455
TITLE Survey of the Operational Facilities and Development Installations for Handling and Removal of Radioactive Waste in the Karlsruhe Nuclear Research Center.
TITLE ANNOTATION Survey of the Operational Facilities and Development Installations for Handling and Removal of Radioactive Waste in the Karlsruhe Nuclear Research Center
AUTHORS Baehr, W.; Diefenbacher, W.; Hild, W.; Krause, H.
ORGANIZATIONAL SOURCE Kernforschungszentrum, Karlsruhe (West Germany).
PAGINATION/DATE Aug 71; 48p
ISSUE N2607
NTIS PRICES pc $3.00/Mf $0.95
NOTES Lang- In German. U. s. sales only
CATEGORY CODES 18G; 77G
INDEX TERMS *decontamination; *radioactive waste; *salt deposits
ABSTRACT For abstract, see Nsa 26 07, number 15857.

ACCESSION NUMBER Bnwl-sa-2460
TITLE Decontamination of Water-Cooled Nuclear Reactors- Status and Future Research.
AUTHORS Ayres, J. A.
ORGANIZATIONAL SOURCE Battelle-Northwest, Richland, Wash. Pacific Northwest Lab.
PAGINATION/DATE 26 Jun 69; 15p
ISSUE N2603
NTIS PRICES pc $3.00 Mf $0.95
CATEGORY CODES 18I; 77H
INDEX TERMS *decontamination; *reactors/ water-cooled
ABSTRACT For abstract, see Nsa 26 03, number 06300.

ACCESSION NUMBER Ad-734 382
TITLE Radiological Safety in Underwater Salvage Operations.
TITLE NOTE Final rept.
AUTHORS Goya, Harry A.; Lal, Ming G.
ORGANIZATIONAL SOURCE Naval Ordnance Lab White Oak Md
PAGINATION/DATE 21 Oct 71; 130p
ISSUE U7203
NTIS PRICES pc $3.00 Mf $0.95
REPORT NOS. Noltr-71-177

CATEGORY CODES 6R; 18H; 57V; 77G
INDEX TERMS (*radiation hazards, Underwater); (*nuclear weapons, Salvage); (*reactor materials, Salvage); Reactor accidents; Safety; Decontamination; Dose rate; Radioactive decay; Tables; Instruction manuals
ABSTRACT The present report is meant to serve as an orientation guide to personnel involved in a nuclear salvage situation. It is intended to make those individuals taking part in such an operation aware of the radiological hazards that might be involved, and also the procedures and practices that might be used to reduce the hazard to salvage personnel. (author)

ACCESSION NUMBER A/conf.49/P-799
TITLE Decontamination of Equipment and Surfaces, Contaminated During the Operation of Nuclear Power Plants with Water-Cooled Reactors.
TITLE ANNOTATION Decontamination of Equipment and Surfaces, Contaminated During Operation of Nuclear Power Plants with Water-Cooled Reactors
AUTHORS Sedov, V. M.; Simanovskii, Yu. M.; Smirnov, V. V.; Ugryumov, M. V.
PAGINATION/DATE Aug 71; 24p
ISSUE N2522
NTIS PRICES pc $3.00 Mf $0.95
NOTES Prepared For 4th International Conference On The Peaceful Uses Of Atomic Energy- Geneva, Switzerland (6 Sep 1971). U. s. sales only
REPORT NOS. Conf-710901-466
CATEGORY CODES 18F; 77F
INDEX TERMS *reactors/ boiling; *reactors/ pressurized-water; *reactors/ water-cooled
ABSTRACT For abstract, see Nsa 25 22, number 53989.

ACCESSION NUMBER N[illegible]-16919
TITLE Decontamination of Radioactively Contaminated Water with Peat Filters.
AUTHORS Bezzegh-Galantai, Maria Magdolna
ORGANIZATIONAL SOURCE Eidgenoessische Technische Hochschule, Zurich (Switzerland).
PAGINATION/DATE 1970; 45p
ISSUE N2521
NTIS PRICES pc $3.00 Mf $0.95
NOTES U. s. sales only
REPORT NOS. Diss-4376
CATEGORY CODES 07A; 68D; 59B
INDEX TERMS *iodine isotopes i-131; *peat; *rainwater; *strontium isotopes sr-9; *yttrium isotopes

ABSTRACT y-9
For abstract, see Nsa 25 21, number 48570.

ACCESSION NUMBER Ucrl-72087
TITLE Possible techniques for decontamination of natural gas from gas wells stimulated by a nuclear explosion
AUTHORS Wethington, John A. Jr
ORGANIZATIONAL SOURCE California Univ., Livermore. Lawrence Radiation Lab.
PAGINATION/DATE 1 Oct 69; 10p
ISSUE N2405
NTIS PRICES hc $3.00 Mf $0.65
NOTES Presented at the Meeting on Engineering with Nuclear Explosives, Las Vegas, Nev. 14-16 Jan 70.
SPONS. ORG. AC./NO. Conf-700101-1
CATEGORY CODES 18C; 7E; 927; 909
INDEX TERMS (*nuclear industrial applications, Petroleum industry); (*radiological contamination, *gases); Exchange reactions; Tritium; Krypton; Decontamination
SUPPLEMENTARY TERMS *natural gas; *gas production; Gasbuggy shot; Radiation decontamination; Plowshare operation; *nuclear stimulation

ACCESSION NUMBER Pb-189 141
TITLE Evaluation of radium contamination in aircraft instrument repair facilities.
TITLE NOTE Environmental health series
AUTHORS Geiger, Eric L.; Schmidt, Gail D.
ORGANIZATIONAL SOURCE Eberline Instrument Corp., Santa Fe, N. mex.
PAGINATION/DATE May 69; 48p
ISSUE U7007
NTIS PRICES hc $3.00 Mf $0.65
SPONS. ORG. AC./NO. Phs-Pub-999-Rh-36
CONTRACT/GRANT NOS. Ph-86-67-66
CATEGORY CODES 13L; 1D; 6R; 941; 902; 923
INDEX TERMS (*flight instruments, Maintenance); (*radium, Flight instruments); (*test facilities, Radiological contamination); Health physics; Alpha particles; Decontamination; Radioactive waste; Disposal; Radiological dosage; Technicians
SUPPLEMENTARY TERMS *radium luminous dials; Radium dial instruments
ABSTRACT Dial-stripping operations in aircraft instrument repair facilities have caused alpha-particle contamination levels exceeding 100,000 disintegrations per minute/100 cm square. Existing radium control programs in

these facilities are inadequate. Instrumentation, training, and assistance for decontamination and waste disposal are needed in most of the facilities surveyed. Two workers in the facility with the highest levels of contamination had body burdens in excess of 40 percent of the maximum permissible body burden of radium, and a third worker had a possible body burden of about 14 percent. Workers in all other facilities included in the study had less than 10 percent of the maximum permissible body burden. A recommended control program for aircraft instrument repair facilities is described. Decontamination of one aircraft instrument repair facility was conducted to evaluate decontamination methods for floors, benches, and equipment. (author)

ACCESSION NUMBER Cea-r-4176
TITLE Metabolism of Different Fractions of Colloidal Solutions of Radioactive Zirconium Citrate.
AUTHORS Rinaldi, Jean-pierre; Gavend, Michel; Blanc-Brude, Claude; Rinaldi, Renaud
ORGANIZATIONAL SOURCE Commissariat A L'Energie Atomique; Grenoble (France). Centre D'Etudes Nucleaires.
PAGINATION/DATE May 71; 19p
ISSUE N2520
NTIS PRICES pc $3.00 Mf $0.95
NOTES U. s. sales only
CATEGORY CODES 06R; 57V
INDEX TERMS *decontamination; *rats; *zirconium isotopes zr-95
ABSTRACT For abstract, see Nsa 25 20, number 46675.

ACCESSION NUMBER Bnwl-b-90
TITLE Equipment Decontamination with Special Attention to Solid Waste Treatment- Survey Report.
AUTHORS Ayres, J. A.
ORGANIZATIONAL SOURCE Battelle-Northwest, Richland, Wash. Pacific Northwest Lab.
PAGINATION/DATE Jun 71; 91p
ISSUE N2520
NTIS PRICES pc $3.00 Mf $0.95
CONTRACT/GRANT NOS. At(45-1)-1830
CATEGORY CODES 18G; 77G
INDEX TERMS *decontamination; *radioactive waste; *remote-handling equipment
ABSTRACT For abstract, see Nsa 25 20, number 46608.

ACCESSION NUMBER Pb-203 955-T
TITLE Effect of 1.3-Diaminopropanol-2-Tetraacetic Acid on Removal of Certain Radioisotopes of Metals from the Organism
AUTHORS Klyachina. K. n.: Podgornaya. I. v.: Ivakin. A. a.
ORGANIZATIONAL SOURCE National Institutes of Health. Bethesda. Md. Translation Unit.
PAGINATION/DATE 13 Sep 71: 3p
ISSUE U7124
NTIS PRICES pc $3.00 Mf $0.95
NOTES Trans. of Gigiena Truda i Professionalnye Zabolevaniya (ussr) v12 p30-32 1968. by Z. knowles.
REPORT NOS. Nih-72-63
CATEGORY CODES 6P: 57S
INDEX TERMS (*radioactive isotopes. Decontamination): (*chelating agents. Radioactive isotopes): Acetic acid: Metals: Zinc: Cadmium: Cobalt: Copper: Nickel: In vivo analysis. Mercury(metal): Technetium: Chromium: Ussr: Translations
SUPPLEMENTARY TERMS *acetic acid/(hydroxypropylene)dinitrilo-tetra
ABSTRACT The results are presented of a study of the possibility of formation in the organism of stable water-soluble complexes of 1.3-diaminopropanol-2-tetraacetic acid (dpta) with Mn2+. zn2+. Co2+. cd2+. cu2+. ni2+. hg2+. te2+ and Cr6+. as indicator of the formation in the organism of the Dpta-metal complexes. the rate of elimination from the organism of radioactive isotopes of the metals indicated above has been used.

ACCESSION NUMBER Pb-202 814
TITLE Nuclear Medical Technology Training
AUTHORS Simmons. Guy H.
ORGANIZATIONAL SOURCE Bureau of Radiological Health. Rockville. Md. Div. of Medical Radiation Exposure.
PAGINATION/DATE Jun 71: 78p
ISSUE U7121
NTIS PRICES pc-Gpo/mf $0.95-Ntis
NOTES Paper copy available from Gpo $0.75 as stock no. 1715-0022. Proceedings of a Colloquium held February 28. 1969. at the Radioisotope Laboratory. Cincinnati General Hospital. Cincinnati. Ohio.
SPONS. ORG. AC./NO. Fda-72-8002
REPORT NOS. Brh/dmre-71-5
CATEGORY CODES 6R: 57V
INDEX TERMS (*education. *radiobiology): Health physics: Radiation hazards: Meetings: Radiation

SUPPLEMENTARY TERMS protection: Radiation effects: Radiation decontamination: Radiation injuries: Programs Nuclear medicine

ABSTRACT The publication contains the proceedings of a colloquium held in Cincinnati, Ohio on February 28, 1969. Sponsors were the Bureau of Radiological Health and the University of Cincinnati Radioisotope Laboratory. A report was presented on progress of the Bureau-supported Nuclear Medical Technology Training Project at the University. Participants reported briefly on other training programs in the field. (author)

ACCESSION NUMBER Ad-729 929

TITLE Proceedings of Meeting on Environmental Pollution (2nd) 24-25 March 1971. Sponsored by American Ordnance Association.

TITLE NOTE Special publication

AUTHORS Love, Solomon

ORGANIZATIONAL SOURCE Edgewood Arsenal Md

PAGINATION/DATE Aug 71; 226p

ISSUE U7121

NTIS PRICES pc $3.00 Mf $0.95

REPORT NOS. Ea-Sp-100-102

CATEGORY CODES 13B; 68A; 68C; 68D

INDEX TERMS (*air pollution, Symposia); (*water pollution, Symposia); Department of defense; Monitors; Raman spectroscopy; Maryland; Pennsylvania; Urban areas; Incinerators; Scientific research; Nuclear power plants; Radiological contamination; Ecology; Disposal, Wastes(sanitary engineering); Plastics; Pesticides.

SUPPLEMENTARY TERMS *solid waste disposal; *government policies; Air pollution detection; Eagle project; Allegheny County(pennsylvania); Hazardous materials; Chemical warfare agent decontamination; Remote sensing

ABSTRACT The titles of the reports presented include: The joint role of Department of Defense and industry in protecting the environment; Changes in Federal organization for environmental control - changes flowing from the establishment of the Environmental Protection Agency; The air pollution story in Allegheny County; 'Can the urban environment be managed'; Federal program for air monitoring technology; M34 demilitarization program Task Force Eagle; Detection and protection aspects of Project Eagle; Consideration in remote raman spectroscopy; Maryland's state and local air quality

control agencies 'routine comprehensive air monitoring system.'; Problems in meeting emission standards; The Environmental Protection Agency R and D program for water quality control; Nuclear power and the environment; Edgewood Arsenal's test area ecology program; Solid waste disposal from the state's point of view; Handling and incineration of pesticides, plastics, and hazardous chemicals; Advanced fluid bed incinerator.

ACCESSION NUMBER	Kfk-1346
TITLE	Decontamination Operations Department Annual Report, 1969.
TITLE ANNOTATION	Prog. Rpt. On Decontamination Operations. Annual, 1969
AUTHORS	Krause, H.
ORGANIZATIONAL SOURCE	Kernforschungszentrum, Karlsruhe (West Germany.
PAGINATION/DATE	Jan 71; 105p
ISSUE	N2516
NTIS PRICES	pc $3.00 Mf $0.95
NOTES	U. s. sales only
CATEGORY CODES	18G; 77G
INDEX TERMS	*nitrates; *nitric acid; *radioactive waste
ABSTRACT	For abstract, see Nsa 25 16, number 37460.

ACCESSION NUMBER	Barc-534
TITLE	Transformation of Naturally Occurring Interstratified Vermiculites of Indian Origin to Pure Vermiculites with Higher Cation Exchange Capacities and Improving Their Suitability for Decontamination of Radioactive Waste.
TITLE ANNOTATION	Transformation of Naturally Occurring Interstratified Vermiculites of Indian Origin to Pure Vermiculites with Higher Cation Exchange Capacities and Improving Their Suitability for Decontamination of Radioactive Waste
AUTHORS	Brat, Satya; Balu, K.; Thomas, K. T.
ORGANIZATIONAL SOURCE	Bhabha Atomic Research Centre, Bombay (India).
PAGINATION/DATE	1971; 109p
ISSUE	N2516
NTIS PRICES	pc $3.00 Mf $0.95
NOTES	U. s. sales only
CONTRACT/GRANT NOS.	657/Rb
CATEGORY CODES	18G; 59B; 77G
INDEX TERMS	*cesium; *radioactive waste; *strontium; *vermiculites

ABSTRACT For abstract, see Nsa 25 16, number 37455.

ACCESSION NUMBER Ad-726 901
TITLE A Radioactive Liquid Waste Treatment Facility Utilizing a Wiped-Film Evaporator
AUTHORS Thieme, Allen; Goff, David L.; Bloore, Ernest W.
ORGANIZATIONAL SOURCE Ballistic Research Labs Aberdeen Proving Ground Md
PAGINATION/DATE Mar 71; 95p
ISSUE U7117
NTIS PRICES pc $3.00 Mf $0.95
REPORT NOS. Brl-1538
PROJECT NOS. Rdt/E-1-N-022601-A-089
TASK NOS. 1-N-022601-A-08904
CATEGORY CODES 18G; 7A; 77G; 59B
INDEX TERMS (*radioactive waste, Disposal); (*disposal, Evaporators); (*evaporators, Radioactive waste); Ion exchange; Decontamination; Distillation; Operation; Costs

ABSTRACT A Radioactive Liquid Waste Concentration facility utilizing wiped-film evaporation and mixed-bed ion exchange treatment has been constructed and evaluated. Low-level wastes to be treated include reactor primary coolant water, liquid decontamination waste generated at reactor sites, and decontamination, laboratory, and laundry waste generated by research laboratories utilizing radioactive isotopes. Some data are reported for processing of alkaline permanganate, hydrazine versenate, ammonium citrate, and potassium tetraborate tetrahydrate solutions. The evaporator operated trouble free and antifoam agents were not required since foaming was not a problem. Operating experience and a cost evaluation are included. (author)

ACCESSION NUMBER Ornl-tr-2306
TITLE Civil Defense.
AUTHORS Akimov, N. I.
PAGINATION/DATE 337p
ISSUE N2512
NTIS PRICES pc $6.00 Mf $0.95
CATEGORY CODES 18F; 6R; 77F; 57V
INDEX TERMS (*civilian defense, *ussr); (*nuclear warfare, Civilian defense); Radiation decontamination; Health physics

ABSTRACT For abstract, see Nsa 25 12, number 26785.

ACCESSION NUMBER Aed-c-13-7
TITLE Bibliographies in Nuclear Science and Technology. Section 13. Decontamination.
TITLE ANNOTATION Bibliographies in Nuclear Science and Technology. Sect. 13. No. 7. 1970
AUTHORS Philipp, Hermann; Wichmann, Erich
ORGANIZATIONAL SOURCE Zentralstelle Fuer Atomkernenergie-Dokumentation. Frankfurt Am Main (West Germany).
PAGINATION/DATE Aug 70: 46p
ISSUE N2512
NTIS PRICES pc $3.00 Mf $0.95
NOTES U. s. sales only
CATEGORY CODES 18F; 77F
INDEX TERMS *bibliographies; *radiation decontamination
ABSTRACT For abstract, see Nsa 25 12, number 26443.

ACCESSION NUMBER Np-18641
TITLE Material Transport in Plant Foods with Regard to Radioactive Contamination and Decontamination.
AUTHORS Paulus, Klaus O.
ORGANIZATIONAL SOURCE Karlsruhe Univ. (West Germany).
PAGINATION/DATE Jul 70; 105p
ISSUE N2509
NTIS PRICES pc $3.00 Mf $0.95
NOTES Thesis. U. s. sales only
CATEGORY CODES 6R; 2D; 18B; 57V; 52E; 77B
INDEX TERMS *angiospermidae; *cerium isotopes ce-144; *cesium isotopes cs-137; *organic acids; *radioisotopes; *strontium isotopes sr-85; *strontium isotopes sr-90; *zirconium isotopes zr-95
ABSTRACT For abstract, see Nsa 25 09, number 18892.

ACCESSION NUMBER Ad-830 807
TITLE Mobile Ion-Exchange Unit.
TITLE NOTE Technical information rept.
ORGANIZATIONAL SOURCE Pittsburgh Univ., Washington, D.c. research Staff.
PAGINATION/DATE Feb 68; 11p
ISSUE U7113
NTIS PRICES pc $3.00 Mf $0.95
NOTES Distribution Limitation now Removed.
SPONS. ORG. AC./NO. Amc-Tir-23.1.3.3
CONTRACT/GRANT NOS. Da-49-186-Amc-214(d)
PROJECT NOS. Da-1-J-643324-D-551
TASK NOS. 1-J-643324-D-55102
CATEGORY CODES 15E; 7A; 60I; 74F
INDEX TERMS (*desalination, *ion exchange); Radiological

contamination; Decontamination; Ion exchange resins; Mobile; Desalination; Purification; Radioactive isotopes; Minerals

SUPPLEMENTARY TERMS *demineralizers; *water treatment devices; Brackish water

ABSTRACT The report describes the development and operational characteristics of the mobile ion-exchange water demineralizing unit. Designed primarily to remove dissolved radioactive solids from water that has been clarified by standard mobile water purification equipment, the unit will be used secondarily to reduce the mineral content of brackish water for drinking purposes. In removing dissolved radionuclides and other deleterious soluble substances from water, this equipment will be used in series operation with either the 600-, 1,500-, or 3,000-gph standard water purification Erdlator. The ion-exchange unit is assembled in an insulated and heated van-type body, mounted on an M45 2 1/2-ton 6x6 truck chassis. (author)

ACCESSION NUMBER Np-18513
TITLE Radioactive contamination- permissible limits, preventive measures, and decontamination.
TITLE ANNOTATION Radioactive contamination- permissible limits, preventive measures, and decontamination
AUTHORS Ragusa, Salvatore
ORGANIZATIONAL SOURCE Ente Nazionale Prevenzione Infortuni, Rome (Italy).
PAGINATION/DATE Mar 64; 294p
ISSUE N2508
NTIS PRICES hc $3.00 Mf $0.95
NOTES U. s. sales only
CATEGORY CODES 6R; 18F; 57V; 77F
INDEX TERMS *decontamination; *personnel; *radiation protection; Health physics
ABSTRACT For abstract, see Nsa 25 08, number 16115.

ACCESSION NUMBER Aed-c-2-10
TITLE Bibliographies in nuclear science and technology. section 02- Contamination and decontamination of food.
TITLE ANNOTATION Bibliographies in nuclear science and technology
AUTHORS Beising, K.
ORGANIZATIONAL SOURCE Zentralstelle Fuer

	Atomkernenergie-Dokumentation. Frankfurt Am Main (West Germany).
PAGINATION/DATE	Apr 70: 61p
ISSUE	N2508
NTIS PRICES	hc $3.00 Mf $0.95
NOTES	U. s. sales only
CATEGORY CODES	6R: 57V
INDEX TERMS	*bibliographies: *fallout: *food: *food chains: *radioisotopes
ABSTRACT	For abstract, see Nsa 25 08, number 16071.

ACCESSION NUMBER	Nvo-410-2
TITLE	Carlsbad Site Roll-Up Program. On-Site Radiological Safety Report.
TITLE ANNOTATION	Carlsbad Site Roll-Up Program. On-Site Radiological Safety Report
AUTHORS	Tappan, John T.; Lorenz, Jerry J.
ORGANIZATIONAL SOURCE	Reynolds Electrical And Engineering Co., Inc., Mercury, Nev. Radiological Sciences Dept.
PAGINATION/DATE	Jul 69: 25p
ISSUE	N2502
NTIS PRICES	pc $3.00 Mf $0.95
CATEGORY CODES	18H: 77G
INDEX TERMS	*decontamination: *plowshare project: *radioactive waste
ABSTRACT	For abstract, see Nsa 25 02, number 02420.

ACCESSION NUMBER	Ad-717 281
TITLE	Fallout Simulant Development: leaching of Fission Products from Nevada Fallout and Properties of Iodine-Tagged Simulant.
TITLE NOTE	Final rept.
AUTHORS	Lane, William B.
ORGANIZATIONAL SOURCE	Stanford Research Inst Menlo Park Calif
PAGINATION/DATE	Jun 70: 56p
ISSUE	U7106
NTIS PRICES	p. $3.00 Mf $0.95
CONTRACT/GRANT NOS.	Dahc20-69-C-0181
PROJECT NOS.	Ocd-3211C: Sri-Egu-7968
CATEGORY CODES	18C: 18H: 6R: 77D: 77G: 57V
INDEX TERMS	(*nuclear explosions, Radioactive fallout): (*fission products, Radiation hazards): Decontamination: Food: Radiological contamination: Radiation effects: Tables
SUPPLEMENTARY TERMS	Leaching: Shasta shot: Small boy shot: Sedan shot: Johnie boy shot: Cesium 134
ABSTRACT	Long term leaching studies were conducted with field samples collected at Small boy, Johnie boy, and Sedan. Fallout from each of these nuclear events was leached by 0.1N Hcl

(to represent stomach acid) and distilled water. The leaching mechanism for the removal of eight year old fission products from Small boy fallout by 0.1N nhl appears to be controlled by a sorption reaction for a few days, after which it is controlled by a diffusion process. Leaching of Small boy fallout by 0.1N hcl removed 60 percent of the activity from large particles and 30 percent from small particles. Leaching by water removed only a few percent of the activity. Generally less than 10 percent of the activity was removed from Johnie boy or Sedan fallout by either 0.1N hcl or water. A method was developed for safe production of radioiodine tagged synthetic fallout with a wide range of soluble or available iodine. (author)

ACCESSION NUMBER	A'-871 815
TITLE	Warheads, Rocket and Guided Missiles, Chemical Agent.
TITLE NOTE	Final rept. on materiel test procedure.
ORGANIZATIONAL SOURCE	Army Test and Evaluation Command, Aberdeen Proving Ground, Md.
PAGINATION/DATE	13 Oct 69; 46p
ISSUE	U71C5
NTIS PRICES	pc $3.00 Mf $0.95
NOTES	Distribution Limitation now Removed.
REPORT NOS.	Mtp-8-2-164
PROJECT NOS.	Amcr-310-6
CATEGORY CODES	15B; 16C; 19G; 14B; 74D; 75F; 79H; 73D
INDEX TERMS	(*chemical warfare agents, Warheads); (*warheads, Test methods); Guided missile warheads; Rocket heads; Safety; Environmental tests; Radiography; Dissemination, Leakage(fluid); Vulnerability; Decontamination; Explosion effects; Nuclear explosions; Maintainability
SUPPLEMENTARY TERMS	Commodity engineering test procedures
ABSTRACT	The engineering test procedure describes test methods and techniques for evaluating the performance and characteristics of chemical agent warheads associated with missile and rocket systems, and for determining the suitability of the tested items for service use in the Us army. (author)

ACCESSION NUMBER Lf-tr-43
TITLE Radioactive Pollution of the Air and Pulmonary Contamination.
AUTHORS Maisin, J. R.
PAGINATION/DATE 11p
ISSUE N2424
NTIS PRICES pc $3.00 Mf $0.95
CATEGORY CODES 06R; 57V
INDEX TERMS *decontamination; *lungs; *man; *personnel; *radiation; *radioisotopes
ABSTRACT For abstract, see Nsa 24 24, number 50864.

ACCESSION NUMBER N70-41822
TITLE Chemical precipitation methods - comparative study.
TITLE ANNOTATION Decontamination methods (Chemical precipitation) For low and intermediate level active liquid radioactive wastes.
AUTHORS Hajek, L.; Hajkova, J.
ORGANIZATIONAL SOURCE Ceskoslovenska Akademie Ved, Rez. Ustav Jaderneho Vyzkumu.
PAGINATION/DATE 1970; 52p
ISSUE S0824
NTIS PRICES pc $3.00 Mf $0.95
REPORT NOS. Ujv-2340-ch
CATEGORY CODES 18G; 77G
INDEX TERMS *decontamination; *liquids; *radioactive wastes; Coagulation; Sediments; Sludge

ACCESSION NUMBER Barc-457
TITLE Development of granular ion exchangers from naturally occurring indian clays- their utilisation for decontamination of radioactive liquid wastes.
AUTHORS Chandra, Umesh
ORGANIZATIONAL SOURCE Bhabha Atomic Research Centre, Bombay (India).
PAGINATION/DATE 1970; 17p
ISSUE N2422
NTIS PRICES hc $3.00 Mf $0.95
NOTES U. s. sales only
CATEGORY CODES 18G; 7A; 77G; 59B
INDEX TERMS *cesium isotopes; *clays; *fission products; *ion exchange materials; *radioactive waste
ABSTRACT For abstract, see Nsa 24 22, number 46296.

ACCESSION NUMBER Ad-714 287
TITLE Design and Application of a Decontamination and Dose Control Model System.
TITLE NOTE Final rept.
AUTHORS Owen, W. Leigh
ORGANIZATIONAL SOURCE Stanford Research Inst Menlo Park Calif
PAGINATION/DATE May 70; 186p
ISSUE U7101
NTIS PRICES pc $3.00 Mf $0.95
NOTES See also report dated Feb 68, Ad-673 199.
CONTRACT/GRANT NOS. Dahc20-70-C-0217
PROJECT NOS. Sri-Mu-7319; Ocd-3231C
CATEGORY CODES 15F; 15C; 74I; 74E
INDEX TERMS (*radioactive fallout, Decontamination); (*nuclear warfare, Radioactive fallout), Models(simulations); Civil defense systems; Radiological dosage; Subroutines; Cost effectiveness; Nuclear explosions; Recovery
SUPPLEMENTARY TERMS Post attack operations; *radiological recovery
ABSTRACT Survival from a contaminating nuclear attack may depend on a capability to effectively implement fallout decontamination operations. The success of these and related recovery operations will require careful and extensive preplanning. Therefore, a decontamination and dose control (d/Dc) model system was developed for determining feasible radiological recovery (rad/Rec) plans and procedures consistent with overall postattack requirements. A test application of the model is made on a regional shopping center. (author)

ACCESSION NUMBER Ad-713 803
TITLE Critical combat performances, Knowledges, & skills required of infantry rifle squad leader: protection against cbr Warfare & nuclear explosions.
TITLE NOTE Research By-Product
AUTHORS Kelly, Henry E.; Magner, George J.
ORGANIZATIONAL SOURCE George Washington Univ Alexandria Va Human Resources Research Office
PAGINATION/DATE Dec 68; 31p
ISSUE U7024
NTIS PRICES hc $3.00 Mf $0.65
CONTRACT/GRANT NOS. Da-44-188-Aro-2
PROJECT NOS. Da-2-J-024701-A-712
TASK NOS. 2-J-024701-A-71201
CATEGORY CODES 15G; 5I; 74H; 70E
INDEX TERMS (*chemical warfare, Army training); (*nuclear warfare, Army training); (*combat surveillance, Army training); (*infantry,

Leadership); Personnel management; Hazards; Decontamination; Instruction manuals; Chemical warfare agents. Performance(human)

SUPPLEMENTARY TERMS *infantry rifle squad leaders

ABSTRACT The paper covers the performances required of the Infantry rifle squad leader to detect, recognize, and report the employment of Cbr and nuclear attacks and to supervise the activities of his men when faced with such hazards. (author)

ACCESSION NUMBER N70-37111

TITLE Use of extra-renal purification methods in treatment of tritiated water contamination.

TITLE ANNOTATION Treating radioactive contamination of human organism by using tritiated water

TITLE NOTE Utilisation des Methodes D'epuration Extrarenale Dans le Traitement de La Contamination Par l'Eau Tritiee

AUTHORS Fabre, J.-L.; Henry, P.; Mazaury, E.; Mercier, J.; Mion, C.

ORGANIZATIONAL SOURCE Commissariat A L Energie Atomique, Marcoule (France). Centre de Production de Plutonium.

PAGINATION/DATE May 70; 87p

ISSUE S0820

NTIS PRICES hc $3.00 Mf $0.65

NOTES Lang- in French. English Summary

REPORT NOS. Cea-r-3974

CATEGORY CODES 6R; 57V

INDEX TERMS *decontamination; *dialysis; *peritoneum; *radioactive contaminants; *tritium; Biological effects; Radiation hazards; Renal function

ACCESSION NUMBER Ad-713 023

TITLE Application of decontamination & dose control Model to an industrial complex.

TITLE NOTE Final rept.

AUTHORS Owen, W. Leigh

ORGANIZATIONAL SOURCE Stanford Research Inst Menlo Park Calif

PAGINATION/DATE Jul 70; 71p

ISSUE U7023

NTIS PRICES hc $3.00 Mf $0.65

CONTRACT/GRANT NOS. Dahc20-70-C-0294

PROJECT NOS. Ocd-32310; Sri-Egu-8348

CATEGORY CODES 15C; 10B, 74E; 67B

INDEX TERMS (*steam power plants, Recovery); (*nuclear warfare, Steam power plants); Decontamination; Mathematical models; Radiological dosage; Costs; Civil defense

SUPPLEMENTARY TERMS *post attack recovery; Industrial recovery; Post attack planning

ABSTRACT The study describes the application of a previously developed decontamination and dose control model to the problem of planning and scheduling the radiological recovery of a representative critical industrial installation, i.e., a steam power plant. The purpose of this study was to determine the magnitude of recovery operations and the related planning factors generated by the model under varied radiological conditions. (author)

ACCESSION NUMBER Ad-711 972
TITLE Guidelines for decontamination.
TITLE NOTE Final rept. 12 Feb 69-31 Jul 70
AUTHORS Bryan, Fred A. Jr; Cross, Stanley T.; Paddock, Richard E.; Sloan, Bertha T.
ORGANIZATIONAL SOURCE Research Triangle Inst Durham N C Operations Research and Economics Div
PAGINATION/DATE May 70; 58p
ISSUE U7022
NTIS PRICES hc $3.00 Mf $0.65
REPORT NOS. Rti-R-OU-444-F
CONTRACT/GRANT NOS. Dahc20-69-C-0131
PROJECT NOS. Ocd-3233C Rti-OU-444
CATEGORY CODES 18H; 18F, 77F
INDEX TERMS (*radioactive fallout, Decontamination); Effectiveness; Recovery; Shielding; Dose rate; Radiation measurement systems, Programming(computers)
SUPPLEMENTARY TERMS Constrip 5 computer program
ABSTRACT Guidelines for decontamination in postattack situations are developed for inclusion in a handbook type document to be prepared by the Office of Civil Defense. This document, which is expected to be used for preplanning and personnel training, will also be suitable for use by operational personnel. The guidelines are based upon analyses made primarily with the Constrip v computer Program. These analyses included consideration of facilities and their environments actually occurring in a large metropolitan area (detroit, Michigan) as well as consideration of theoretical source-shield-detector configurations. Results indicate that effects of source field decontamination are significant for distances up to 200 feet from a facility. (author)

ACCESSION NUMBER	Ad-711 532
TITLE	Experimental comparison of fallout field simulation techniques
AUTHORS	Maloney, Joseph C.; Meredith, John L.
ORGANIZATIONAL SOURCE	Ballistic Research Labs Aberdeen Proving Ground Md
PAGINATION/DATE	Jul 70; 130p
ISSUE	U7021
NTIS PRICES	hc $3.00 Mf $0.65
REPORT NOS.	Brl-1485
PROJECT NOS.	Da-1-B-062104-A-089
CATEGORY CODES	18H; 15F; 77G; 741
INDEX TERMS	(*radioactive fallout, Simulation); (*nuclear warfare, Recovery); Decontamination; Shielding; Radiation measurement systems; Test methods; Computer programs; Cesium; Cobalt; Lanthanum
SUPPLEMENTARY TERMS	Cobalt 60; Cesium 137; Lanthanum 140
ABSTRACT	The specific objective of the work reported herein was to compare directly the results obtained from using the techniques and isotopes employed in experimental fallout field simulation and thus, to determine ground effects factors and dose-distance relationships that would affect decontamination operations. For the conditions of this experiment: the cumulative fractions of the infinite field exposure as a function of distance is the same for the circulating point source and spread source systems. Therefore each system can be used to experimental advantage, the results compared directly and applied to operational requirements in fallout fields. The air lift point source system with cobalt or cesium sources is an adequate technique for simulating fallout fields only for heights of detection above 25 feet. Ground roughness affects the exposure fields from circulating point and distributed particulate sources. For the Camp McCoy test area these factors are 0.90 for cobalt circulating point sources, 0.85 for cesium circulating point sources, and 0.57 for lanthanum tagged particles at 3 ft elevation. (author)

ACCESSION NUMBER	N70-28910
TITLE	Apparatus & methods for preparation of irradiated & non-irradiated nuclear fuel samples for mass spectrometric determination of uranium isotope composition.
TITLE ANNOTATION	Apparatus and methods for preparation of irradiated and non-irradiated nuclear fuel samples for mass spectrometric determination of uranium isotope composition
TITLE NOTE	Apparative Anordnungen Und Verfahren Zur Vorbereitung Bestrahlter Und Unbestrahlter Kernbrennstoffproben Zur Massenspektrometrischen Bestimmung des Uran-Isotopenverhaeltnisses
AUTHORS	Stoeppler, M.
ORGANIZATIONAL SOURCE	Kernforschungsanlage, Juelich (West Germany). Zentrallab. Fuer Chemische Analyse.
PAGINATION/DATE	Dec 69; 9056p
ISSUE	S0814
NTIS PRICES	hc $10.00 Mf $0.65
NOTES	Lang- in German, English Summary
REPORT NOS.	Jul-633-ca
CATEGORY CODES	18J; 77I
INDEX TERMS	*colorimetry; *mass spectroscopy; *nuclear fuels; *spectrophotometry; *uranium isotopes; Decontamination; Fission products; Iron; Protactinium; Thorium; Uranium compounds; X ray irradiation

ACCESSION NUMBER	N70-28907
TITLE	Requirements of cooling gas for closed reactor loops, especially for carbon dioxide loop lv5 & helium loop lv17.
TITLE ANNOTATION	Requirements of cooling gas for closed reactor loops, especially for carbon dioxide loop lv5 And helium loop lv17
TITLE NOTE	Anforderungen An Kuehlgas Fuer Bestrahlungskreislaeufe Insbesondere Fuer Das Co2-loop Lv5 Und Das He-loop Lv17
AUTHORS	Krug, W.
ORGANIZATIONAL SOURCE	Kernforschungsanlage, Juelich (West Germany). Inst. Fuer Reaktorwerkstoffe.
PAGINATION/DATE	Dec 69; 13p
ISSUE	S0814
NTIS PRICES	hc $3.00 Mf $0.65
NOTES	Lang- in German
REPORT NOS.	Jul-629-rw
CATEGORY CODES	18J; 77J
INDEX TERMS	*carbon dioxide; *cooling systems; *gas cooled reactors; *helium; *reactor safety; Closed cycles; Decontamination; Gas chromatography; Nuclear fuel elements;

Radioactive contaminants

ACCESSION NUMBER Dun-6075
TITLE Special operating procedure: cell 1 Decontamination
AUTHORS Junghans, C. a.; Clausing, J. c.
ORGANIZATIONAL SOURCE Douglas United Nuclear, Inc., Richland, Wash.
PAGINATION/DATE 29 Jul 69; 26p
ISSUE N2410
NTIS PRICES hc $3.00 Mf $0.65
CATEGORY CODES 18E; 77H
INDEX TERMS (*nuclear power plants, Decontamination); Pumps

ACCESSION NUMBER Dun-5935
TITLE Cell no. 1 isolation for steam generators 1A & 1B decontamination & retubing, & valve check lists
AUTHORS Tausch, E. t.
ORGANIZATIONAL SOURCE Douglas United Nuclear, Inc., Richland, Wash.
PAGINATION/DATE 18 Jun 69; 29p
ISSUE N2410
NTIS PRICES hc $3.00 Mf $0.65
CATEGORY CODES 18E; 77H
INDEX TERMS (*nuclear power plants, Decontamination); Check valves

ACCESSION NUMBER Bnl-50184
TITLE Decontamination of melter off-Gas condensates from phosphate glass process by distillation
AUTHORS Drager, R. f.; Johnson, R. w.; Hatch, L. p.
ORGANIZATIONAL SOURCE Brookhaven National Lab., Upton, N.y.
PAGINATION/DATE Mar 69; 15p
ISSUE N2408
NTIS PRICES hc $3.00 Mf $0.65
CATEGORY CODES 18G; 92J
INDEX TERMS (*radioactive waste, *glass); Condensation; Decontamination; Distillation
SUPPLEMENTARY TERMS *purex process; Phosphate glass; Solidification

ACCESSION NUMBER Ad-704 990
TITLE Critical combat performances. Knowledges & skills required Of infantry rifle platoon leader. Protection against cbr Warfare & nuclear explosives
AUTHORS Kelly. Henry E.: Magner. George J.
ORGANIZATIONAL SOURCE George Washington Univ Alexandria Va Human Resources Research Office
PAGINATION/DATE 21 Oct 69: 32p
ISSUE U7012
NTIS PRICES hc $3.00 Mf $0.65
CONTRACT/GRANT NOS. Da-44-188-Aro-2
PROJECT NOS. Da-2-0-062107-A-712: Da-2-J-024701-A-712
TASK NOS. 2-J-024701-A-71201
CATEGORY CODES 5I: 15B: 15F: 907
INDEX TERMS (*infantry. *leadership): (*officer personnel. *army training): Protective masks: Eyeglasses: Protective treatments: Shelters: Dosimeters: Detectors: Chemical warfare agents: Biological warfare agents: Radiological warfare agents: Decontamination kits: Personnel management: Safety
SUPPLEMENTARY TERMS *platoon leaders: Battlefield cues: Combat skills: Combat performance
ABSTRACT The document is one of a series of research by-products that details the critical skills. knowledges. and performances the infantry rifle platoon leader must possess for effective individual and unit combat performances. The overall goal of the research is to improve officer training in these critical combat skill areas necessary for effective leadership. This document concerns the critical skill requirements in the area of protection against Cbr warfare and nuclear explosives. (author)

ACCESSION NUMBER Ucrl-Trans-10412
TITLE Washout of radioactive isotopes injected artificially into a cloud. according to ground-Station observational data (o vymyvanii Iskusstvenno Vvedennykh v Oblako Radioaktivnykh Izotopov po Dannym Nazemnykh Stantsii Nablyudeniya)
AUTHORS Shopauskas. K. k.: Styro. B. I.: Vebra. E. yu.: Vebrene. B. k.: Shalavenius. S. s.
ORGANIZATIONAL SOURCE California Univ.. Livermore. Lawrence Radiation Lab.
PAGINATION/DATE Oct 69: 15p
ISSUE N2406
NTIS PRICES hc $3.00 Mf $0.65
Trans. of Issledovanie Protsessov

Samoochishcheniya Atmosfery ot Radioaktivnykh Izotopov. Palanga, 7-9 Jul 66. Papers (process of Atmospheric Self-Scavanging of Radioactive Isotopes). vilnyus 1968 p323-333, by A. m. a. mincer. Portions of this document are not fully legible.

CATEGORY CODES 18H; 48; 927; 905
INDEX TERMS (*clouds, Radioactive isotopes); (*radioactive isotopes, *atmospheric precipitation); Decontamination; Radioactive fallout; Tracer studies; Ussr
SUPPLEMENTARY TERMS Translations

ACCESSION NUMBER Ornl-tr-1881
TITLE Procedure for preliminary decontamination of nuclear fuels to belprocessed
AUTHORS Baihr, Werner; Vogg, Hubert
ORGANIZATIONAL SOURCE Oak Ridge National Lab., Tenn.
PAGINATION/DATE 1969; 4p
ISSUE N2406
NTIS PRICES hc $3.00 Mf $0.65
NOTES Trans. of Patent (west Germany) 1 184 503, 31 Dec 64, by Gregg Mansfield.
CATEGORY CODES 18J; 939
INDEX TERMS (*reactor fuel processing, Decontamination); Fission products; Patents; West Germany

ACCESSION NUMBER Dun-Sa-125
TITLE Development of a waste disposal method for n. reactor's decontamination wastes
AUTHORS Kratzer, W. k.; Bainard, W. d.
ORGANIZATIONAL SOURCE Douglas United Nuclear, Inc., Richland, Wash.
PAGINATION/DATE 5 Nov 69; 14p
ISSUE N2406
NTIS PRICES hc $3.00 Mf $0.65
CONTRACT/GRANT NOS. At(45-1)-1857
CATEGORY CODES 18G; 927
INDEX TERMS (*radioactive waste, Disposal); Production reactors; Decontamination
SUPPLEMENTARY TERMS Hanford production reactors(n)

ACCESSION NUMBER N70-13566
TITLE Contamination control handbook.
TITLE ANNOTATION Contamination control handbook
ORGANIZATIONAL SOURCE Sandia Corp., Albuquerque, N. Mex.
PAGINATION/DATE 1969; 314p
ISSUE S0803
NTIS PRICES hc $6.00 Mf $0.95
NOTES Coll- 314 P Refs

REPORT NOS.	Nasa-cr-61264; Nasa-sp-5076
CONTRACT/GRANT NOS.	Nasa order h-13245A
CATEGORY CODES	13H; 6M; 18F; 916; 927; 923
INDEX TERMS	*contamination; *handbooks; *quality control; *technology utilization; Bibliographies; Decontamination; Microorganisms; Pollution; Radioactive contaminants; Trace contaminants

ACCESSION NUMBER	Ad-699 382
TITLE	Evaluation of protection achieved by limited strip decontamination. Part 2.
TITLE NOTE	Final rept. 9 May 67-31 Dec 69
AUTHORS	Bryan, Fred A. Jr; Paddock, Richard E.
ORGANIZATIONAL SOURCE	Research Triangle Inst Durham N C Operations Research and Economics Div
PAGINATION/DATE	Dec 69; 129p
ISSUE	U7005
NTIS PRICES	hc $6.00 Mf $0.95
NOTES	See also Part 1. Ad-689 516.
REPORT NOS.	Rti-R-Ou-333-2
CONTRACT/GRANT NOS.	N00228-67-C-2297
PROJECT NOS.	Ocd-32338; Rti-Ou-333
CATEGORY CODES	6R; 18H; 927
INDEX TERMS	(*urban areas, Decontamination); (*radiological contamination, *buildings); Radioactive fallout; Protection; Shielding, Programming(computers); Operations research; Michigan; Gamma rays; Penetration; Roofs
SUPPLEMENTARY TERMS	Constrip 5 computer program; Evaluation
ABSTRACT	A discussion is given of analyses utilizing the Constrip v computer Program performed for the purpose of decontamination operation guideline development. The theoretical calculations are described in summary form and principal results are presented. Also included is a description of a survey of essential facilities in the Detroit area, with an accompanying analyses of these facilities to determine the effectiveness of limited strip decontamination operations. (author)

ACCESSION NUMBER	N59-40574
TITLE	Use of a thin-film evaporator for bitumen coating of radioactive concentrates.
TITLE ANNOTATION	Pilot installation for bitumen coating of concentrates using thin-film evaporator
TITLE NOTE	Utilisation D'un Evaporateur A Couche Mince pour l'Enrobage Par le Bitume de Concentrats Radioactifs
AUTHORS	Cudel, Y.; Hullo, R.; Lefillatre, G.; Rodi,

ORGANIZATIONAL SOURCE	L.; Rodier, J. Commissariat A L Energie Atomique, Chuscian (France). Centre de Production de Plutonium.
PAGINATION/DATE	Jul 69; 32p
ISSUE	S0724
NTIS PRICES	hc $6.00 Mf $0.95
NOTES	Lang- in French, English Summary
REPORT NOS.	Cea-r-3742
CATEGORY CODES	18G; 11C; 927; 920
INDEX TERMS	*concentrating; *evaporators; *pilot plants; *thin films; Bitumens; Decontamination, Precipitation (chemistry); Protective coatings; Radioactive wastes

ACCESSION NUMBER	N69-38022
TITLE	usefulness of decay rate in management of radioactive waste stocks.
TITLE ANNOTATION	Usefulness of decay rate in radioactive waste stock management
TITLE NOTE	de l'Interet de la Decroissance pour La Gestion des Dechets Radioactifs
AUTHORS	Cohendy, G.; Rodier, J.
ORGANIZATIONAL SOURCE	Commissariat A L Energie Atomique, Chuscian (France). Centre de Production de Plutonium.
PAGINATION/DATE	May 69; 24p
ISSUE	S0722
NTIS PRICES	hc $6.00 Mf $0.95
NOTES	Lang- in French; English Summary
REPORT NOS.	Cea-r-3731
CATEGORY CODES	18J; 939
INDEX TERMS	*decay rates; *management; *radioactive wastes; Activation; Decontamination; Economics; Exploitation; Fission products; France; Half life; Plutonium; Radioactive debris; Radioactive decay; Radioactive isotopes; Reactor safety; Removal; Uranium; Waste disposal

ACCESSION NUMBER	N69-38007
TITLE	Decontamination of irradiated-fuel processing wastes using manganese dioxide hydrate.
TITLE ANNOTATION	Decontamination of irradiated-fuel processing waste using manganese diodide hydrate
TITLE NOTE	Decontamination des Effluents de Traitement des Combustibles Irradies Par le Bioxyde de Manganese Hydrate
AUTHORS	Auchapt, J.-m.; Gaudier, J.-f.
ORGANIZATIONAL SOURCE	Commissariat A L Energie Atomique, Paris (France). Centre de Production de Plutonium.
PAGINATION/DATE	Jun 69; 39p
ISSUE	S0722

NTIS PRICES hc $6.00 Mf $0.95
NOTES Lang- in French, English Summary
REPORT NOS. Cea-r-3821
CATEGORY CODES 18J; 93J
INDEX TERMS *calcium carbonates; *decontamination; *manganese oxides; *waste disposal; Hydrates; Nuclear fuels; Radioactive wastes; Removal; Strontium

ACCESSION NUMBER N69-38002
TITLE Internal decontamination of a radioactive zirconium-niobium oxalate in rats.
TITLE ANNOTATION Internal decontamination of radioactive zirconium-niobium oxalate in rats
TITLE NOTE Decontamination Interne Chez le Rat D'un Oxalate de Zirconium-niobium Radioactif
AUTHORS Gavend, M.; Rinaldi, J.-p.; Rinaldi, R.
ORGANIZATIONAL SOURCE Commissariat A L Energie Atomique, Grenoble (France). Centre D'etudes Nucleaires.
PAGINATION/DATE May 69; 15p
ISSUE S0722
NTIS PRICES hc $3.00 Mf $0.95
NOTES Lang- in French, English Summary
REPORT NOS. Cea-r-3810
CATEGORY CODES 6R; 923
INDEX TERMS *decontamination; *oxalates; *rats; Niobium compounds; Niobium 95; Zirconium compounds; Zirconium 95

ACCESSION NUMBER N69-37878
TITLE determination of bromine in wheat, flour & bread by neutron activation analysis.
TITLE ANNOTATION Determination of bromine in wheat, flour and bread by neutron activation analysis
AUTHORS Das, H. a.
ORGANIZATIONAL SOURCE Reactor Centrum Nederland, Petten.
PAGINATION/DATE Apr 69; 13p
ISSUE S0722
NTIS PRICES hc $3.00 Mf $0.95
REPORT NOS. Rcn-106
CATEGORY CODES 2A; 7D; 914; 909
INDEX TERMS *bromine isotopes, *flour (food); *neutron activation analysis; Bactericides; Decontamination; Fungi, Grains (food); Nuclear capture; Nuclear reactions; Preserving; Thermal neutrons; Trace contaminants; Vapor phases

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ERDA ENERGY DATA BASE

DAVE SIVZZY.V*WK DECONTAMINATION
ERDAREC?N. ED. 3/177

DAVE SCHNEIDMILLER
REACTOR DECONTAMINATION
ENERGY DATA BASE
8-10-77

13/3/0000001-0000077// 1 PAGE 1

77R0081705 EDB-77-14 22.060
LMEC--75-10(VOL.2)/
FFTF SIV QUALIFICATION TEST PROGRAM.VOLUME 2.POST-TEST DISASSEMBLY,CLEANING,AND INSPECTION/
MILLER,D.B./
LIQUID METAL ENGINEERING CENTER,CANOGA PARK,CALIF.(USA)/
CONTRACT EY-76-C-03-0700/

56/

US/

ERA-02:036263/EDB-77:091706/

A COMPREHENSIVE TEST PROGRAM WAS CONDUCTED ON THE FFTF 8-IN.SECONDARY ISOLATION VALVE (SIV)TO QUALIFY ITS USE IN THE FFTF SYSTEM.THE TESTS WERE PERFORMED IN THE SMALL COMPONENTS TEST LOOP/PIPING AND VALVE TEST INSERT (SCTL/PVTI)FACILITY AT THE LIQUID METAL ENGINEERING CENTER (LMEC) IN ACCORDANCE WITH WESTINGHOUSE TEST REQUEST WDTRS 26.05.PHYSICAL INSPECTIONS WERE CONDUCTED AT THE CONCLUSION OF SODIUM TESTING AND FOLLOWING AN ALCOHOL CLEANING PROCESS.RESULTS OF THE INVESTIGATION INDICATE THAT THE VALVE IS SUITABLE FOR USE AS AN FFTF PLANT SPARE./

OTHER/

F/

22.0900/

CLEANING/FFTF REACTOR:TI/INSPECTION/PERFORMANCE TESTING/VALVES:DI/

13/0/0000001-0000077// 2

77C0073841 EDB-77-13 22.090

INIS-MF--3239/

NUCLEAR POWER PLANT RADIATION:PERSONNEL SAFETY ASPECTS/

ROEKMANTARA,R.(INSTITUT TEKNOLOGI BANDUNG (INDONESIA)DEPARTEMEN FISIKA)/

NATIONAL ATOMIC ENERGY AGENCY,JAKARTA (INDONESIA)/

1975/

INDONESIAN/

INIS/

NUCLEAR POWER PLANTS TECHNOLOGY/

9 933 300/

ID/

ID/

AIX-03:299241/ERA-02:034465/EDB-77:073841/

A REACTOR USING WATER AS COOLANT,MODERATOR,AND HEAT TRANSFER MEDIUM CAN PRODUCE SIGNIFICANT INTERNAL AND EXTERNAL RADIATION CAUSED BY CONTAMINATION. THE PROCESS OF CONTAMINATION AND ACTIONS THAT MUST BE TAKEN TO AVOID WORKERS FROM RECEIVING MORE THAN THE MAXIMUM PERMISSIBLE DOSE ARE PRESENTED./

6 REFS./

WORKSHOP ON NUCLEAR POWER PLANTS TECHNOLOGY/

JAKARTA,INDONESIA/

25 MAR 1976/

NP/

22.0900/

CONTAMINATION / CORROSION /DECONTAMINATION/FISSION PRODUCTS/HEALTH HAZARDS/IODINE 131/MAXIMUM PERMISSIBLE DOSE/NUCLEAR POWER PLANTS:TI/RADIATION MONITORING/RADIATION PROTECTION:T,DI/TRITIUM/

13/0/0000001-0000077// 3

77C0073800 EDB-77-13 22.090

AED-CONF--75-769-062/

NUCLEAR EMERGENCY ASSISTANCE TEAM,A MOBILE INTERVENTION FACILITY FOR NUCLEAR ACCIDENTS/

KOELZER,W./

KERNFORSCHUNGSZENTRUM KARLSRUHE (GERMANY,F.R.)/

1975/

CONF-7509129--140/

NTIS (US SALES ONLY)/

3 580 000/

13/0/0000001-0000077// 3 CONTINUATION 1 PAGE 2

DE/

DE/

AIX-03:287041/ERA-02:032581/EDB-77:073800/

A NUCLEAR EMERGENCY ASSISTANCE TEAM CONSISTING OF A VEHICLE POOL AND A STOCK OF TECHNICAL EQUIPMENT WAS SET UP FOR OPERATION IN CASE OF MAJOR REACTOR ACCIDENTS.THE EQUIPMENT IS KEPT IN 6 CONTAINERS WHICH CAN BE SHIPPED ON TRUCKS,BY RAIL OR BY HELICOPTER OR PLANE.TECHNICAL EQUIPMENT AND TASKS OF EACH CONTAINER ARE BRIEFLY EXPLAINED.SPECIAL TRANSPORT

SEP 1975/

22.0900/
CONTAINERS /DECONTAMINATION/EMERGENCY PLANT,01/LABORATORY EQUIPMENT/RADIATION MONITORING/REACTOR ACCIDENTS:T1/REACTOR SAFETY/REMOTE HANDLING EQUIPMENT/SAFETY ENGINEERING/TRANSPORT/VEHICLES/

13/0/0000001-0000077// 4
77F0073788 EDB-77-13 22.070
EUR--5468/
DECONTAMINATION OF THE HFR DISMANTLING CELL/
CLOES,K./HUSMANN,K./VON DER HARDT,P./
COMMISSION OF THE EUROPEAN COMMUNITIES,PETTEN (NETHERLANDS).JOINT NUCLEAR RESEARCH CENTER/
MAY 1976/
NTIS (US SALES ONLY)/
1 910 950/
NL/
XE/
AIX-08:299235/ERA-02:034443/EDB-77:073788/
THE COMMISSION OF THE EUROPEAN COMMUNITIES OPERATES IN THE PETTEN ESTABLISHMENT OF THE JOINT RESEARCH CENTRE (EURATOM). A 45 MW LIGHT-WATER COOLED MATERIALS TESTING REACTOR,THE HFR.INSIDE THE REACTOR CONTAINMENT BUILDING,ON TOP OF A SIDE WING OF THE MAIN POOL,A HOT CELL CONSTRUCTED FOR THE DISMANTLING OF IRRADIATED EQUIPMENT WAS BROUGHT INTO ACTIVE SERVICE IN JULY 1965. EARLY IN 1973, THE CELL WAS CONTAMINATED BY 0.1 TO 1 CI OF PO/SUP 210/,ORIGINATING FROM AN IRRADIATION CAPSULE CONTAINING 81 IMPREGNATED GRAPHITE SPECIMENS.DUE TO THE ELEVATED RADIOTOXICITY OF THIS ISOTOPE,AND TO NUMEROUS POTENTIAL WAYS OF SPREADING OUT THE CONTAMINATION IT WAS DECIDED TO STOP ROUTINE OPERATION OF THE CELL UNTIL A SATISFACTORY DEGREE OF DECONTAMINATION HAD BEEN REACHED. TWO YEARS HAVE BEEN SPENT FOR PREPARATION OF SPECIALIZED EQUIPMENT AND THOROUGH CLEAN-UP AND OVERHAUL WORK OF THE CELL.IT WENT BACK INTO NORMAL OPERATION ON FEBRUARY 21ST,1975 AND HAS SINCE THEN BEEN WORKING VERY SUCCESSFULLY./
NP/
22.0700/
CONTAMINATION / DECONTAMINATION / HFR REACTOR: T1/HOT CELLS:01/LABORATORY EQUIPMENT/PERSONNEL/POLONIUM 210/PROTECTIVE COATINGS/RADIATION PROTECTION/SPRAY COATING/SURFACE CLEANING/

13/0/0000001-0000077// 5
77F0073656 EDB-77-13 22.020
PROCESS FOR TREATING TRITIATED WATER/
O'BRIEN,C.J./
TO AEROJET-GENERAL CORP/
PATENT/
FRENCH PATENT 2,290,744/A//
17 OCT 1975/
FRENCH/
US/
FR/
AIX-08:303559/ERA-02:034369/EDB-77:073656/
A PROCESS FOR EXTRACTING TRITIUM FOR THE COOLING WATER OF A NUCLEAR REACTOR IS DESCRIBED.IT CONSISTS IN OBTAINING A MEDIUM WITH A HIGH LEVEL OF TRITIUM BY TRANSFERRING TRITIUM FROM THE COOLING WATER OF THE REACTOR TO AN ACCEPTOR PRODUCT HAVING AN AFFINITY FOR TRITIUM GREATER THAN THE AFFINITY OF WATER FOR TRITIUM AND TO EXTRACT THE TRITIUM FROM THIS CONCENTRATED MEDIUM./

13/0/0000001-0000077// 5 CONTINUATION 1 PAGE 3
AVAILABLE FROM INSTITUT NATIONAL DE LA PROPRIETE INDUSTRIELLE,PARIS (FRANCE)/PRIORITY CLAIM:7 NOV 1974,US/
22.0200/
DECONTAMINATION: 02/PRIMARY COOLANT CIRCUITS:M2.01/SEPARATION PROCESSES/TRITIUM/WATER CHEMISTRY/WATER COOLED REACTORS:
M1/

13/0/0000001-0000077// 6

SORPTION METHOD FOR PURIFICATION OF COVER GAS OF THE PRIM[illegible] [illegible] OF THE BR-5 REACTOR [illegible]
ISTARKHOV,N.N./EFIMOV,I.A./KRASNOYAROV,N.V./SHERESHKOV,V.[illegible]
KERNFORSCHUNGSGRUPPE KARLSRUHE (GERMANY,F.R.).INTERNATIONALES BUERO/UEBERSETZERGRUPPE/
AUG 1976/
GERMAN/
CONF-750972--7/
NTIS (US SALES ONLY)/
TRANSLATED FROM ADSORBTSIONNYI METOD OCHISTKI ZASHCHITNOGO GAZA PERVOGO KONTURA REAKTORA BR-5 OT RADIOAKTIVNOGO KSENONA/
9 201 152/
DE/
DE/
AIX-08:293848/ERA-02:034216/EDB-77:073460/
THE TEST SYSTEM TO CLEAN THE ARGON FROM THE PRIMARY CIRCUIT OF THE BR-5-REACTOR IS DESCRIBED,EXPERIMENTAL DATA AND OPERATIONAL EXPERIENCE ARE GIVEN. THE ADSORPTION PLANT CONTAINS 3 ADSORBERS 2 OF WHICH FUNCTION WITHOUT COOLING AND HEATING AND ARE CHARGED WITH 5,8 KG COAL OF THE TYPE SKT-2M EACH.THE OPERATION TEMPERATURE OF THE COAL IS STATED AS 20-300C. THE THIRD ADSORBER IS COOLED DOWN TO /SUP -/50/SUP D/C BY MEANS OF VAPOURS OF FLUID NITROGEN.THIS ADSORBER CONTAINS 0, 91 KG COAL SKT-2M. AN ELECTRIC HEATING CONDUCTOR IS AVAILABLE FOR THE REGENERATION OF THE COAL.THE GAS CLEANING SYSTEM FORMS A CLOSED CYCLE AND IS DESIGNED FOR A GAS FLOW OF 0.3 M/SUP 3//H WITH A PRESSURE OF 1.0 ATMOSPHERIC EXCESS PRESSURE. THE CLEANING OF ARGON WAS EXAMINED DURING OPERATION OF THE REACTOR AND AFTER THE REACTOR HAD BEEN SHUT DOWN. THE DECREASE IN THE CONCENTRATION OF XENON-133 IN NATURAL AND FORCED CIRCULATION OF THE SODIUM,THE SPEED OF ESCAPE FROM THE SODIUM,THE CHANGE OF THE CONCENTRATION OF THE XENON-133 IN ARGON AFTER GAS CLEANING AND DEGASING OF THE PRIMARY CIRCUIT AS WELL AS THE CHANGE OF THE CONCENTRATION OF THE XENON-133 DURING THE OPERATION OF THE GAS-CLEANING SYSTEM BEFORE AND AFTER THE PENETRATION ARE SHOWN GRAPHICALLY./
IAEA SPECIALISTS MEETING ON FISSION AND CORROSION PRODUCTS IN PRIMARY SYSTEMS OF LMFBR*S/
DIMITROVGRAD,USSR/
9 SEP 1975/
NP/
21.0500/
ADSORPTION / ARGON/CHARCOAL/COOLANT CLEANUP SYSTEMS:Q1/COVER GAS/DECONTAMINATION/DEGASSING/DIAGRAMS/EFFICIENCY/FISSION PRODUCTS/LMFBR TYPE REACTORS/PRIMARY COOLANT CIRCUITS/PURIFICATION/SBR-5 REACTOR:T1/SODIUM/XENON 133/

13/0/0000001-0000077// 7
77X0073416 EDB-77-13 21.050
HEDL-TME--76-27/
SODIUM ENGINEERING AND TECHNOLOGY TECHNICAL PROGRESS REPORT,JULY--SEPTEMBER 1976/
ATWOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
LMFBR/
CONTRACT EY-76-C-14-2170/
DEC 1976/
AT/
2 906 800/
US/
US/
ERA-02:034197/EDB-77:073416/
PROGRESS IN LMFBR-RELATED SODIUM TECHNOLOGY STUDIES IS REPORTED IN THE AREAS OF RADIOACTIVITY CONTROL TECHNOLOGY, SODIUM SYSTEMS DEVELOPMENT,SODIUM SYSTEMS ENGINEERING,SODIUM SYSTEMS ANALYSIS,AND THE HYDRAULICS AND MECHANICS PROGRAM. (DG)/
OTHER/

13/0/0000001-0000077// 7 CONTINUATION 1 PAGE 4

P/
21.0500/22.0600/
CLEANING: Q3 / CLINCH RIVER BREEDER REACTOR/COLD TRAPS/CORROSION:Q2/CORROSION PRODUCTS/DECONTAMINATION/FAILED ELEMENT MONITORS: M4, Q1 / FFTF REACTOR: T5/FISSION PRODUCTS/LMFBR TYPE REACTORS:T1/MATHEMATICAL MODELS/PERFORMANCE TESTING:Q4/ PRIMARY COOLANT CIRCUITS:M2,Q1/RADIOACTIVITY TRANSPORT:Q2/REACTOR COMPONENTS:M3,Q1,Q5/REACTOR COOLING SYSTEMS/REMOVAL:Q6 /RESEARCH PROGRAMS/SODIUM:M6/

00001-0000077// 8
77[illegible]073415 EDB-77-13 21.050
HEDL-TME--76-26/
SODIUM ENGINEERING AND TECHNOLOGY TECHNICAL PROGRESS REPORT,APRIL--JUNE,1976/
ATWOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
LMFBR/
CONTRACT EY-76-C-14-2170/
DEC 1976/
AT/
2 906 800/
US/
US/
ERA-02:034196/EDB-77:073415/
PROGRESS IN LMFBR-RELATED SODIUM TECHNOLOGY STUDIES IS REPORTED IN THE AREAS OF RADIOACTIVITY CONTROL TECHNOLOGY, SODIUM SYSTEMS DEVELOPMENT,SODIUM SYSTEMS ENGINEERING,SODIUM SYSTEMS ANALYSIS,AND THE HYDRAULICS AND MECHANICS PROGRAM. (DG)/
OTHER/
P/
21.0500/22.0600/
CLEANING: Q3 / CORROSION:Q2/CORROSION PRODUCTS/DECONTAMINATION/FAILED ELEMENT DETECTION/FAILED ELEMENT MONITORS:M4,Q1/ FFTF REACTOR: T5 / FISSION PRODUCTS /LMFBR TYPE REACTORS:T1/MATHEMATICAL MODELS/PERFORMANCE TESTING:Q4/PRIMARY COOLANT CIRCUITS:M2,Q1/RADIOACTIVITY TRANSPORT:Q2/REACTOR COMPONENTS:M3,Q5,Q1/REACTOR COOLING SYSTEMS/REMOVAL:Q6/SODIUM:M6/

13/0/0000001-0000077// 9
77B0073197 EDB-77-13 21.000
NUCLEAR POWER PLANTS/
MARGULOVA,T.CH./
BOOK/IN GERMAN/
VEB DEUTSCHER VERLAG FUER GRUNDSTOFFINDUSTRIE/LEIPZIG/1976/
GERMAN/
DD/
DD/
AIX-08:296935/ERA-02:034046/EDB-77:073197/
THE TEXTBOOK FOCUSES ON THE TECHNOLOGY AND THE OPERATING CHARACTERISTICS OF NUCLEAR POWER PLANTS EQUIPED WITH PRESSURIZED WATER OR BOILING WATER REACTORS,WHICH ARE IN OPERATION ALL OVER THE WORLD AT PRESENT.THE FOLLOWING TOPICS ARE DEALT WITH IN RELATION TO THE COMPLETE PLANT AND TO ECONOMICS:DISTRIBUTION AND CONSUMPTION OF ELECTRIC AND THERMAL ENERGY, TYPES AND EQUIPMENT OF NUCLEAR POWER PLANTS,CHEMICAL PROCESSES AND MATERIAL BALANCE,ECONOMICAL CHARACTERISTICS CONCERNING HEAT AND ENERGY, REGENERATIVE PREHEATING OF FEED WATER, DEGASSING AND CONDENSER SYSTEMS,WATER SUPPLY, EVAPORATORS, DISTRICT HEATING SYSTEMS, STEAM GENERATING SYSTEMS AND TURBINES,COOLANT LOOPS AND PIPES,PLANT SITING, VENTILATION AND DECONTAMINATION SYSTEMS,REACTOR OPERATION AND MANAGEMENT,HEAT TRANSFER INCLUDING ITS CALCULATION,DESIGN OF REACTOR BUILDINGS, AND NUCLEAR POWER PLANTS WITH GAS OR SODIUM COOLED REACTORS.NUMEROUS TECHNICAL DATA OF MODERN SOVIET NUCLEAR POWER PLANTS ARE INCLUDED.THE BOOK IS OF INTEREST TO GRADUATE AND POST-GRADUATE STUDENTS IN THE FIELD OF NUCLEAR ENGINEERING AS WELL AS TO NUCLEAR ENGINEERS./
KERNKRAFTWERKE/
TRANSLATION OF 'ATOMNYE JELEKTRICHESKIE STANTSII',MOSCOW,VYSSHAYA SHKOLA,1974,2.EDITION/
21.0000/
BWR TYPE REACTORS / CONSTRUCTION / DECONTAMINATION/ECONOMICS/FEEDWATER HEATERS/GAS COOLED REACTORS/MATERIAL BALANCE/ NUCLEAR ENGINEERING /NUCLEAR POWER PLANTS:M/PWR TYPE REACTORS/REACTOR COOLING SYSTEMS/REACTOR OPERATION/SITE SELECTION/ SODIUM COOLED REACTORS/STEAM GENERATORS/VENTILATION/

13/0/0000001-0000077// 10 PAGE 5

77J0067788 EDB-77-12 22.050
AGING AND POISONING OF IODINE SORPTION SUBSTANCES IN NUCLEAR POWER PLANTS/
FURRER,J./KOEMPFFER,R./WILHELM,J.G./
KERNFORSCHUNGSZENTRUM,KARLSRUHE,GER./
KERNTECHNIK/18/7/JUL 1976/
313-317/

:TA/
ERA-02:026624/EDB-77:067788/
ADSORPTION OF SOLVENTS ON KL-IMPREGNATED ACTIVATED CHARCOALS IN FILTER SYSTEMS CONSTITUTES POLLUTION OF THE FILTERS. THIS POLLUTION RESULTS IN A DECISIVE DETERIORATION OF THE REMOVAL OF FISSION IODINE. MEASURES ARE SUGGESTED TO KEEP SOLVENTS AWAY FROM THE ACTIVATED CHARCOAL DURING THE CONSTRUCTION AND OPERATION OF NUCLEAR POWER STATIONS./
22.0502/50.0300/
ACTIVATED CARBON / AIR FILTERS: T2,01/BENCH-SCALE EXPERIMENTS:02/DECONTAMINATION/EFFICIENCY/IODINE 131/NUCLEAR POWER PLANTS:T1/POLLUTION CONTROL EQUIPMENT/POTASSIUM IODIDES/RELIABILITY/

13/0/0000001-0000077// 11
77JOC66312 EDB-77-12 21.050
FUEL HANDLING FACILITY OF THE JAPAN EXPERIMENTAL FAST REACTOR "JOYO"/
HORITA,S.(FUJI ELECTRIC CO.LTD.,KAWASAKI,KANAGAWA (JAPAN).KAWASAKI FACTORY)/KINOSHITA,M./UENO,M./MORISHITA,K./
FUJI JIHO/46/4/APR 1975/
290-296/
JAPANESE/
JP/
JP/
FUJIA/
AIX-07:261097/ERA-02:019789/EDB-77:066312/
THE EXPERIMENTAL FAST REACTOR "JOYO" WITH PLUTONIUM/URANIUM MIXED OXIDE FUEL AND SODIUM COOLING IS NOW IN SYNTHETIC FUNCTIONAL TESTS. THE FUEL HANDLING FACILITY USED FOR THE REACTOR AND ITS SPECIFICATION AND FEATURES ARE DESCRIBED. TO REPLACE THE SPENT FUEL WITH FRESH ONE IN THE REACTOR VESSEL, AN IN-CORE REFUELING MACHINE IS USED. A FUEL LOADING AND UNLOADING MACHINE REMOVES THE SPENT FUEL OUT OF THE REACTOR VESSEL, AND MOVES IT IN THE REACTOR CONTAINMENT VESSEL. FOR RELAYING THE SPENT FUEL FROM THE REACTOR CONTAINMENT VESSEL TO THE REACTOR-ASSOCIATED BUILDING, THERE IS A TRANSFER ROTOR. THE SPENT FUEL IS THEN CLEANED, CANNED AND STORED TEMPORARILY IN A WATER POOL. FRESH FUEL IS KEPT IN A RECEIVING STORAGE. IT IS MOVED INTO THE REACTOR VESSEL BY THE FUEL LOADING AND UNLOADING MACHINE. AFTER TRANSFER THROUGH THE TRANSFER ROTOR./
21.0500/
CLEANING/CLOSURES/JOYO REACTOR:T1/REACTOR CHARGING MACHINES:01/REACTOR FUELING/REMOTE HANDLING EQUIPMENT:01/SPENT FUEL ELEMENTS/SPENT FUEL STORAGE/

13/0/0000001-0000077// 12
77XOC66297 EDB-77-12 21.050
AI-ERDA--13160/
SODIUM TECHNOLOGY COVER GAS SEAL DEVELOPMENT PROGRAMS. QUARTERLY TECHNICAL PROGRESS REPORT, JULY--SEPTEMBER 1975/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
CONTRACT E(04-3)-0824/
15 NOV 1976/
AT/
9 500 331/
US/
US/
ERA-02:029538/EDB-77:066299/
PROGRESS IS REPORTED IN STUDIES ON SODIUM REMOVAL AND DECONTAMINATION OF LMFBR COMPONENTS AND IN THE FFTF-LMFBR SEAL TEST PROGRAM.(DG)/
OTHER/
P/

21.0500/
CLINCH RIVER BREEDER REACTOR/COVER GAS/DECONTAMINATION:05/FFTF REACTOR:T1/LMFBR TYPE REACTORS:T2/PERFORMANCE TESTING:04 /REACTOR COMPONENTS:02,45/REACTOR COOLING SYSTEMS:02,43/REMOVAL:06/RESEARCH PROGRAMS/SEALS:01,03,46/SODIUM:95/SURFACE CLEANING/

13/0/0000001-0000077// 13

NTAMINATION OF PRIMARY CIRCUIT EQUIPMENT ...
EL, K / GLAESER, E. (VEB - KERNKRAFTWERK - BRUNO - LEUSCHNER ... ESWALD (GERMAN DEMOCRATIC REPUBLIC).BETRIEBSTEYL
RNKRAFTWERK RHEINSBERG)/BOSHOLM,J./HOFFMANN,H.J.(INGENIEURHOCHSCHULE ZITTAU (GERMAN DEMOCRATIC REPUBLIC))/
KERNENERGIE/19/4/1976/
129-132/
GERMAN/
DD/
DD/
KERNA/
AIX-07:263097/ERA-02:019703/EDB-77:066273/
A PROCEDURE OF CHEMICAL DECONTAMINATION OF THE INTERNAL SURFACES OF PRIMARY CIRCUIT EQUIPMENT IS DESCRIBED.IT IS BASED ON A SHORT-TIME REACTION OF AN ACID SOLUTION OF EDTA AT ELEVATED TEMPERATURES.STARTING FROM TESTS ON A LABORATORY SCALE, THE PROCEDURE WAS TESTED IN AN ISOLATED LOOP OF THE WWER-2 REACTOR.AN EVALUATION OF THE PROCEDURE IS GIVEN CONSIDERING THE AMOUNTS OF METAL OXIDES AND THE ACTIVITY REMOVED FROM THE PROTECTIVE COATINGS IN A SINGLE STEP AS WELL AS DOSIMETRIC AND ECONOMIC PARAMETERS./
21.0200/
COST/DECONTAMINATION/EDTA/EFFICIENCY/PRIMARY COOLANT CIRCUITS:Q1/RHEINSBERG AKW1 REACTOR:T1/SURFACES/

13/0/0000001-0000077// 14
77C0061280 EDB-77-11 22.090
KURRI-TR--125/
BEHAVIOR OF RADIOACTIVE IODINE AT THE TIME OF REACTOR ACCIDENT AND ITS COUNTERPLAN/
MURATA,T.(HITACHI LTD.,TOKYO (JAPAN))/
KYOTO UNIV.,KUMATORI,OSAKA (JAPAN).RESEARCH REACTOR INST./
PWR AND BWR/
1974/
JAPANESE/
INIS/
SYMPOSIUM ON RADIOIODINE/
KATSURAYAMA,K./TSUJIMOTO,T.(EDS.)/
3 655 000/
JP/
JP/
AIX-09:281351/EDB-77:061280/
WHEN AN ACCIDENT OCCURS IN A REACTOR,VERY VOLATILE RADIOACTIVE IODINE IS THE MOST DANGEROUS FISSION PRODUCT.AMONG THE ISOTOPES OF RADIOACTIVE IODINE,/SUP 131/I WHICH HAS LONGER HALF-LIFE IS HARMFUL.SUPPOSING ONE-TENTH OF THE RADIOACTIVITY OF 10 / SUP 6/CI IN A REACTOR OF 10/SUP 6/KW HEAT OUTPUT IS DUE TO /SUP 131/I,IT WEIGHTS ABOUT 100G.THE BEHAVIOR OF THE RADIOACTIVE IODINE IS GREATLY SUBJECTED TO THE INFLUENCE OF INSIDE TEMPERATURE AND OTHER CONDITIONS.THEREFORE,VERY PRUDENT POLICIES ARE ADOPTED BY INSTALLING EMERGENCY CORE COOLING SYSTEM,CONTAINMENT VESSELS,AND ACTIVATED CARBON FILTERS. FOR THE EMERGENCY CORE COOLING SYSTEM,WATER SPRAYING,FLOODING WITH LOW PRESSURE WATER,AND MAINTAINING OF WATER LEVEL BY HIGH PRESSURE WATER INJECTION ARE ADOPTED,WHILE IN THE CONTAINMENT VESSELS,MEASURES ARE TAKEN SO AS TO LOWER THE INSIDE PRESSURE AND MINIMIZE LEAKAGE./
SYMPOSIUM ON RADIOIODINE/
KUMATORI,OSAKA,JAPAN/
24 OCT 1973/
NP/
22.0900/21.0100/21.0200/
ADSORPTION/BWR-TYPE REACTORS:M2/CONTAINMENT SHELLS/CONTAMINATION/DECONTAMINATION/FILTRATION/FISSION PRODUCT RELEASE:M, C3 / FISSION PRODUCTS / IODINE 131 / METHYL IODIDE /PARTICLE SIZE/PWR-TYPE REACTORS:M1/RADIONUCLIDE MIGRATION/REACTOR ACCIDENTS:M3,Q1,Q2/REACTOR SAFETY:M,Q1,Q2/

13/0/0000001-0000077// 15 PAGE 7

77X0061227 EDB-77-11 22.060
JAERI-M--6245/
REPORT ON THE OPERATION,UTILIZATION AND TECHNICAL DEVELOPMENT OF RESEARCH REACTORS AND HOT LABORATORY.(APRIL 1,1974 TO MARCH 31,1975)/
JAPAN ATOMIC ENERGY RESEARCH INST.,TOKYO/
OCT 1975/

13 000/

JP/

AIX-03:282029/ERA-02:029743/EDB-77:061227/

ANN ANNUAL REPORT DESCRIBING THE WHOLE ACTIVITIES OF THE DIVISION OF RESEARCH REACTOR OPERATION IN FISCAL 1976 IS PRESENTED. MAIN WORKS OF THE DIVISION ARE OPERATION AND MAINTENANCE OF JRR-2, JRR-3 AND JRR-4, AND POST-IRRADIATION TEST AT HOT LABORATORY. IN PERFORMANCE OF THE WORKS MENTIONED, RESEARCH AND DEVELOPMENT WERE MADE IN VARIOUS FIELDS OF REACTOR ENGINEERING SUCH AS OPERATION AND MAINTENANCE OF REACTORS, TECHNICAL MANAGEMENT OF FUELS AND COOLANTS, RADIATION CONTROL AND IRRADIATION TECHNIQUE, ETC. POST-IRRADIATION TESTS OF VARIOUS FUELS AND MATERIALS WERE PERFORMED AT THE HOT LABORATORY AS WELL AS THE TECHNICAL DEVELOPMENT OF TEST PROCEDURES./

NP/

22.0600/

DECONTAMINATION /FUEL MANAGEMENT/HEAVY WATER/HELIUM/HOT LABS/IRRADIATION DEVICES/JAERI/JRR-2 REACTOR:T1/JRR-3 REACTOR: T2 / JRR-4 REACTOR: T3/MANAGEMENT/MEASURING METHODS/NEUTRON RADIOGRAPHY/RADIATION MONITORING/REACTOR COMPONENTS/REACTOR MAINTENANCE/REACTOR OPERATION:01,02,03/REPAIR/

13/0/0000001-0000077// 16

77C0061208 EDB-77-11 22.050

KURRI-TR--125/

RADIOACTIVE IODINE RELEASES FROM NUCLEAR POWER PLANT.II/

HASHIMOTO,M.(JAPAN ATOMIC ENERGY RESEARCH INST.,TOKAI,IBARAKI.TOKAI RESEARCH ESTABLISHMENT)/

KYOTO UNIV.,KUMATORI,OSAKA (JAPAN).RESEARCH REACTOR INST./

1974/

JAPANESE/

INIS/

SYMPOSIUM ON RADIOIODINE/

KATSURAYAMA,K./TSUJIMOTO,T.(EDS.)/

3 655 000/

JP/

JP/

AIX-03:281975/ERA-02:029722/EDB-77:061208/

INTERNAL RADIATION DOSE THROUGH THE RESPIRATORY INTAKE OF FISSION PRODUCTS IS PREDOMINANTLY DUE TO RADIOACTIVE IODINE NOT ONLY AT THE TIME OF REACTOR ACCIDENTS BUT ALSO IN NORMAL OPERATION OF NUCLEAR FACILITIES. TECHNOLOGICAL STUDIES IN THIS FIELD HAVE THUS BEEN QUITE ACTIVE TO THIS DAY. WITH THE RAPID ADVANCE OF NUCLEAR POWER GENERATION IN RECENT YEARS, THE EFFORTS TO REDUCE ENVIRONMENTAL RELEASE OF RADIOACTIVE IODINE AND TO ENHANCE ENVIRONMENTAL SAFETY ARE ALL THE MORE EMPHASIZED. EXPERIENCES IN THE JAPAN ATOMIC ENERGY RESEARCH INSTITUTE DURING PAST ABOUT SIX YEARS ARE DESCRIBED CONCERNING THE RADIOACTIVE IODINE RELEASE TO THE ATMOSPHERE IN /SUP 131/I PRODUCTION AND THE MEASURES TAKEN TO REDUCE THE RELEASE. THEN, PROBLEMS ARE EXPOUNDED REGARDING THE RADIOACTIVE IODINE RELEASE AT THE TIME OF REACTOR ACCIDENTS AND IN SPENT FUEL REPROCESSING./

SYMPOSIUM ON RADIOIODINE/

KUMATORI,OSAKA,JAPAN/

24 OCT 1973/

NP/

22.0500/

DECONTAMINATION / ENVIRONMENT / FILTRATION / FISSION PRODUCT RELEASE: 01, 03/GROUND RELEASE:02/IODINE 131:T2/ISOTOPE PRODUCTION / NUCLEAR FACILITIES: T1 / NUCLEAR POWER PLANTS:T3/ORGANIC IODINE COMPOUNDS/RADIONUCLIDE MIGRATION/REACTOR ACCIDENTS/

13/0/0000001-0000077// 17

77C0061207 EDB-77-11 22.050

KURRI-TR--125/

RADIOACTIVE IODINE RELEASES FROM NUCLEAR POWER PLANT.I/

HASHIMOTO,T.(JAPAN ATOMIC POWER CO.,TSURUGA,FUKUI.TSURUGA POWER STATION)/

KYOTO UNIV.,KUMATORI,OSAKA (JAPAN).RESEARCH REACTOR INST./

1974/

MPOSIUM ON RADIOIODINE/
TSURAYAMA,K./TSUJIMOTO,T.(EDS)/
3 555 000/
JP/
JP/
AIX-08:281975/ERA-02:029721/EDB-77:061207/
CONCERNING THE RELEASE OF RADIOACTIVE IODINE FROM NUCLEAR POWER PLANTS,THE GUIDELINES AND DATA BOTH IN JAPAN AND ABROAD ARE BRIEFED, INCLUDING THOSE IN THE UNITED STATES, TSURUGA NUCLEAR POWER STATION AND WORKING GROUP OF THE ENVIRONMENTAL RADIATION STUDY COMMITTEE.IN CASE OF THE TSURUGA NUCLEAR POWER STATION,THE RADIATION DOSE AND OTHER DATA FOR A FEW YEARS ARE PRESENTED.PARAMETERS AND FACTORS PROPOSED BY THE WORKING GROUP COVER SUCH AS THE DOSE THROUGH FOOD INTAKE AND RESPIRATION,CONCENTRATION FACTOR,ETC./
SYMPOSIUM ON RADIOIODINE/
KUMATORI,OSAKA,JAPAN/
24 OCT 1973/
NP/
22.0500/51.0302/05.3000/
CONTAMINATION: 03 / DECONTAMINATION / DIET/ENVIRONMENT/FISSION PRODUCT RELEASE:02/FOOD CHAINS:T3/GASEOUS WASTES/GROUND RELEASE:01/IODINE 131:T1/NUCLEAR POWER PLANTS:T2/RADIATION DOSES/RADIATION PROTECTION/RADIOACTIVITY/

13/0/0000001-0000077// 18
77C0051035 EDB-77-11 21.050
CEA-CONF--3520/
DECONTAMINATION OF MATERIALS AFTER EXPOSURE IN LMFBR PRIMARY CIRCUIT/
LAFON,A./SERMET,E./MSIKA,D./BROUTIN,J.C./
CEA CENTRE D'ETUDES NUCLEAIRES DE CADARACHE,13 - SAINT-PAUL-LES-DURANCE (FRANCE)/
1976/
NTIS (US SALES ONLY)/
1 256 000/
FR/
FR/
AIX-08:290336/ERA-02:029547/EDB-77:061086/
LIQUID METAL FAST BREEDER REACTOR PRIMARY CIRCUIT COMPONENTS ARE CONTAMINATED BY MASS TRANSFERS OF RADIOACTIVE ATOMS. THE DEPOSITED ACTIVITY REMAINING AFTER SODIUM REMOVAL PENALIZES THE MAINTENANCE OF THESE COMPONENTS:IT IS THUS NECESSARY TO REMOVE THIS CONTAMINATION BEFORE REPAIRING AND PUTTING THEM BACK INTO OPERATION.EXPERIMENTS ON SMALL CONTAMINATED SAMPLES REVEALED A NUMBER OF PHENOMENA OCCURING DURING CONTAMINATION AND PERMITTED A SELECTION OF DECONTAMINATION PROCESSES FOR REMOVING THE ACTIVITY WITHOUT DAMAGING THE MATERIALS.THE RESULTS OBTAINED ARE VALID FOR QUENCHED 316 STAINLESS STEEL./
INTERNATIONAL CONFERENCE ON LIQUID METAL TECHNOLOGY IN ENERGY PRODUCTION/
CHAMPION,USA/
27 APR 1976/
NP/
21.0500/
DECONTAMINATION:02/LMFBR TYPE REACTORS:T1/MANGANESE 54/PRIMARY COOLANT CIRCUITS:T2,01/STAINLESS STEEL-316/

13/0/0000001-0000077// 19
77J0061049 EDB-77-11 21.010
PLANT ENGINEERING EXPERIENCE IN WASTE-WATER TREATMENT PLANTS IN NUCLEAR POWER STATIONS WITH PRESSURISED AND BOILING WATER REACTORS.NEW DEVELOPMENTS IN THESE FIELDS/
MEININGER,S.(KRAFTWERK UNION A.G.,OFFENBACH (GERMANY,F.R.))/
VGB KRAFTWERKSTECH./55/9/SEP 1976/

13/0/0000001-0000077// 19 CONTINUATION 1 PAGE 9

555-561/
GERMAN/
DE/
DE/
VGBKP/
AIX-08:296056/ERA-02:029491/EDB-77:061049/

[illegible] GREATEST OVERALL DECONTAMINATION EFFECT. IF THE AREA [illegible] EVAPORATION WE HAVE ALSO BEEN ABLE TO [illegible] THE MOST [illegible] DEVELOPMENT ACTIVITY IN THE INDUSTRY CONCERNED. TO IMPROVE THE EFFECTIVENESS OF MODERN EVAPORATION PLANTS, THEIR RETENTION CAPACITY FOR INDIVIDUAL RADIONUCLIDES SHOULD BE SPECIALLY INVESTIGATED. IN THIS WAY, IT WILL BE FOUND THAT SPECIFIC ISOTOPES ARE MORE VOLATILE AND REQUIRE DELICATE TREATMENT./

10 [illegible]/4 TABS./
21 [illegible]00/21.0200/05.2001/
EW TYPE REACTOR: T1 / COOLANT CLEANUP SYSTEMS/DECONTAMINATION/LIQUID WASTES/PWR TYPE REACTORS:T2/RADIOACTIVE WASTE PROCESSING:T,Q1,Q2/RADIOACTIVE WASTE/WATER/WATER CHEMISTRY/

13/0/0000001-0000077// 20
77J0[illegible]218 EDB-77-11 05.090
CONTINUOUS DIALYTIC DECONTAMINATION OF DISSOLVED FUEL ELEMENTS BY SOLVENT:POLYMERIC MEMBRANES/
KETZINEL,Z./BOGER,Z./CIKUREL,M./VOFSI,D./JAGUR-GODZINSKI,J./GASSNER,S./
NUCLEARES.CENT.,NEGEV,ISRAEL/
IND.ENG.CHEM.,PROD.RES.DEV./15/4/OCT 1976/
52[illegible]529/
IL/
US/
ISPRA/
ERA-02:028938/EDB-77:060218/
A CONTINUOUS DECONTAMINATION PROCESS, BASED ON A SELECTIVE DIALYTIC PERMEATION OF URANYL IONS THROUGH **SOLVENT-POLYMERIC** MEMBRANES, HAS BEEN DEVISED. SPIRAL-WOUND PERMEATORS WERE CONSTRUCTED AND TESTED FOR THEIR EFFICIENCY IN SEPARATING URANIUM FROM ITS FISSION PRODUCTS AND FROM ALUMINUM SOLUTIONS, SIMILAR IN COMPOSITION TO THOSE OBTAINED BY DISSOLVING SPENT FUEL ELEMENTS OF RESEARCH TYPE **SWIMMING-POOL** REACTORS, WERE USED IN THE EXPERIMENTS. THE PERFORMANCE OF THE PERMEATORS DID NOT DETERIORATE AFTER THREE MONTHS OF OPERATION AND 18 MONTHS OF STORAGE. THE EXPERIMENTAL RESULTS INDICATE THAT THE TESTED NO SEPARATION TECHNIQUE COULD REPLACE THE STANDARD **DECONTAMINATION** PROCEDURE BASED ON SOLVENT EXTRACTION. 10 REFS./
05.0800/40.0702/22.0300/
ALUMINIUM: T3 / DECONTAMINATION / DIALYSIS / DIFFUSION / FISSION PRODUCTS /FISSION PRODUCTS:T4/IRRADIATION/MEMBRANES/ PERMEABILITY/POLYMERS/REPROCESSING:Q1/RESEARCH REACTORS/SEPARATION PROCESSES:Q2,Q3,Q4/SOLVENTS/SPENT FUELS:T1/URANIUM:T2 /URANYL COMPLEXES/

13/0/0000001-0000077// 21
77J0054434 EDB-77-10 22.020
DECONTAMINATION OF NUCLEAR COMPONENTS BY MEANS OF FUSED SALTS/
HENTSCHEL,D./DIPPEL,T./KUNZE,S.(KERNFORSCHUNGSZENTRUM KARLSRUHE (GERMANY,F.R.).ABT.BEHANDLUNG RADIOAKTIVER ABFAELLE)/
ATOMWIRTSCH.,ATOMTECH./21/9/10/SEP 1976/
467-468/
GERMAN/
DE/
DE/
AWAKA/
AIX-03:283891/ERA-02:022429/EDB-77:054434/
EVEN AT COMPARATIVELY LOW TEMPERATURES FUSED SALTS ARE PROVIDED WITH USEFUL DECONTAMINATION EFFECTS AGAINST CORROSION COATINGS FIRMLY ADHERING TO METALLIC MATERIALS. IF THE IMMERSION TECHNIQUE IS REPLACED BY SPRAYING, WHICH MEANS THAT THE SALT LAYER CAN BE VERY THIN, THEN ONLY SMALL QUANTITIES OF CONTAMINATION WASTE WILL OCCUR./
2 TABS./3 REFS./
22.0200/
CORROSION/DECONTAMINATION:Q1/MOLTEN SALTS/REACTOR COMPONENTS:T1/SPRAYED COATINGS/STAINLESS STEELS/

13/0/0000001-0000077// 22

77C0054388 EDB-77-10 22.020
AED-CONF--76-050-004/
PLASTIC LINES IN POWER STATIONS -- ESPECIALLY IN NUCLEAR POWER STATIONS/
MEININGER,S./
VGB TECHNISCHE VEREINIGUNG DER GROSSKRAFTWERKSBETREIBER E.V.,ESSEN (GERMANY,F.R.)/
1976/

CONFERENCE 'AUXILIARY COMPONENTS IN NUCLEAR POWER STATION TECHNICAL PAPERS 'SECTION 5' AND 'SECTION 6'/
200 234/
DE/
DE/
A1X-07:263387/ERA-02:026543/EDB-77:054388/
PLASTIC PIPES ARE NOT OFTEN USED UNDER PRESSURE IN NUCLEAR POWER STATIONS.THE REASONS FOR THIS ARE NOT ALWAYS CLEAR SINCE PLASTICS HAVE GREAT ADVANTAGES FOR SPECIAL APPLICATIONS, E.G.A LOW DEGREE OF CONTAMINATION OR SCALING,GOOD DECONTAMINATION, GOOD CHEMICAL RESISTANCE,ETC.PIPES MADE OF POLYETHYLENE HARD - PEH - HAVE THEREFORE BEEN INSTALLED IN SOME NUCLEAR WASTE TREATMENT PLANTS TO REPLACE SOME OF THE CONVENTIONAL AUSTENITIC STEEL PIPES.GENERAL CRITERIA FOR THE USE OF PLASTIC TUBES ARE PRESSURE AND TEMPERATURE RESISTANCE AS WELL AS AGEING AND RESISTANCE TO RADIATION.THE STRENGTHS OF PEH APE GENERALLY REGARDED AS EXACTLY CALCULABLE.REGARDING RADIATION RESISTANCE ACCELERATED AGEING CAN BE DERIVED APPROXIMATELY LABORATORY TESTS./
10 FIGS.AVAILABLE FROM ZAED/
VGB CONFERENCE 'AUXILIARY COMPONENTS IN NUCLEAR POWER STATIONS'/
ESSEN,F.R.GERMANY/
17 MAR 1976/
NP/
22.0200/
CORROSION RESISTANCE / DECONTAMINATION/MECHANICAL PROPERTIES:02/PIPES:T2,01/POLYETHYLENES/POWER REACTORS:T1/RADIATION EFFECTS/REACTOR COMPONENTS/

13/0/0000001-0000077// 23
77C0054272 EDB-77-10 21.050
KFK-TR--460/
DECONTAMINATION OF THE PRIMARY CIRCUIT OF THE REACTOR BR-5/
EFIMOV,I.A./NIKULIN,M.P./SMIRNOV-AVERIN,A.P./TYMOSH,B.S./SHERESHKOV,V.S./
KERNFORSCHUNGSZENTRUM KARLSRUHE (GERMANY,F.R.).INTERNATIONALES BUERO/UEBERSETZERGRUPPE/
JUN 1976/
GERMAN/
AED-CONF--75-774-004/CONF-750972--3/
TIC/
9 201 152/
DE/
DE/
A1X-07:271040/ERA-02:026432/EDB-77:054272/
IN THIS LECTURE,METHODS,TECHNIQUES,AND RESULTS OF THE WATER VAPOUR AND ACID DECONTAMINATION OF THE PRIMARY CIRCUIT OF THE REACTOR BR-5,CARRIED OUT IN 1971,ARE DISCUSSED.RESULTS ARE PRESENTED OF THE RADIOACTIVITY MEASUREMENTS FOR FISSION PRODUCTS, AND OF THE GAMMA DOSE RATES MEASURED AT THE PIPES AND COMPONENTS OF THE REACTOR'S PRIMARY CIRCUIT BEFORE AND AFTER DECONTAMINATION. TECHNOLOGICAL OPERATIONS CONCERNING THE REGENERATION OF THE COLD TRAP FOR OXIDES OF THE PRIMARY CIRCUIT ARE PORTRAYED./
2 FIGS./5 TABS./3 REFS.AVAILABLE FROM ZAED/
IAEA SPECIALISTS MEETING ON FISSION AND CORROSION PRODUCTS IN PRIMARY SYSTEMS OF LMFBR'S/
DIMITROVGRAD,USSR/
8 SEP 1975/
NP/
21.0500/
DECONTAMINATION/DOSE RATES/FISSION PRODUCTS/PERFORMANCE/PIPES/PRIMARY COOLANT CIRCUITS:01/RADIOACTIVITY/SBR-5 REACTOR:T1/

13/0/0000001-0000077// 24 PAGE 11

77R0054259 EDB-77-10 21.050
ANL-TC--133/
SODIUM REMOVAL DISASSEMBLY AND EXAMINATION OF THE FERMI SECONDARY SODIUM PUMP/
MAFFEI,M.P./FUNK,C.W./BALLIF,J.L./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
CONTRACT EY-76-C-14-2170/

05 800/

US/

ERA-02:024428/INS-77:005190/EDB-77:054259/

THE FERMI SECONDARY PUMP IS A CENTRIFUGAL SINGLE STAGE DESIGN.THE PUMP HAD BEEN OPERATED MORE THAN 42,000 HOURS BETWEEN 450 AND 800/SUP O/F.SODIUM WAS DRAINED FROM THE PUMP IN 1973 AND THE SYSTEM WAS BACK FILLED WITH CARBON DIOXIDE. THE PUMP WAS FABRICATED FOR 2.25 CR-1 MO CROLOY STEEL.PRIOR TO CLEANING THE PUMP WAS INERTED AND HEATED WITH 150/SUP O/F NITROGEN USING THE PUMP CASING AS THE CONTAINMENT VESSEL.THE WATER-VAPOR-NITROGEN PROCESS WAS USED IN THREE INCREASING STAGES OF WATER CONCENTRATION. THE HYDROGEN CONCENTRATION IN THE DISCHARGE LINE WAS FOLLOWED AS AN INDICATOR OF THE SODIUM-WATER REACTION RATE.UPON COMPLETION OF THE HYDROGEN EVOLUTION,THE PUMP WAS RINSED SEVERAL TIMES WITH HOT WATER. SIX POUNDS OF SODIUM WERE REMOVED FROM THE PUMP DURING A PROCESS CYCLE OF 79 HOURS INCLUDING RINSING.THE MAXIMUM PUMP TEMPERATURE RECORDED WAS 175/SUP O/F WITH NO VARIATION EXCEEDING 10/SUP O/F.THE HYDROGEN CONCENTRATION IN THE EFFLUENT PROVIDED A VERY SATISFACTORY INDEX FOR CONTROL OF THE REACTION BY ADJUSTMENT OF THE WATER-VAPOR CONCENTRATION FEED TO THE SYSTEM.RINSING EFFECTIVENESS WAS LIMITED BY A POOL OF WATER IN THE VOLUTE THAT WAS NOT DRAINABLE WITH THE AVAILABLE SYSTEM HOOK UP. SODIUM AND ITS COMPOUNDS WERE REMOVED FROM ALL INTERNAL SURFACES THAT COULD BE OBSERVED BY THE FIRST STAGE OF DISASSEMBLY.ALL SUCH SURFACES WERE COATED WITH A BLACK DEPOSIT.AREAS ABOVE THE SODIUM LIQUID LEVEL WERE COATED WITH A VERMILLION COLORED OXIDE. SODIUM WAS FOUND ON THE (1) THREADS OF THE IMPELLER NUT LOCK SCREW,(2)IMPELLER NUT-TAPERED SHAFT INTERFACE,AND (3)VAPOR DEPOSITED SODIUM WAS FOUND IN THE OIL SEAL./

OTHER/

P7

21.0500/

CLEANING/ENRICO FERMI-1 REACTOR:T1/PUMPS:Q1/REMOVAL/SECONDARY COOLANT CIRCUITS/SODIUM/

13/0/0000001-0000077// 25

77C0054226 EDB-77-10 21.040

AECL--5113/

DECONTAMINATION OF CANDU PRIMARY COOLANT SYSTEM/

PETTIT,P.J.(ATOMIC ENERGY OF CANADA LTD.,CHALK RIVER,ONTARIO.CHALK RIVER NUCLEAR LABS.)/

ATOMIC ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT/

SEP 1975/

INIS/

ACTIVITY TRANSPORT IN CANDUS/

TOM,INSON,M.(ED.)/

C 653 COC/

CA/

CA/

BIX-07:273305/ERA-02:026389/EDB-77:054226/

DECONTAMINATION OF RADIOACTIVE SYSTEMS IS NECESSARY TO REDUCE PERSONNEL RADIATION EXPOSURES AND ALSO TO REDUCE EXPOSURE DURING SPECIAL WORK.MECHANICAL DECONTAMINATION METHODS ARE SOMETIMES USEFUL,BUT MOST CONTAMINATED SURFACES ARE INACCESSIBLE, SO CHEMICAL DECONTAMINATION OFTEN IS PREFERRED.THE A-P CITROX METHOD WILL REMOVE MOST CONTAMINANTS FROM CANDU SYSTEMS, BUT IS COSTLY AND LONG;DAMAGES COMPONENTS,AND PRODUCES LARGE QUANTITIES OF RADIOACTIVE LIQUID WASTE.THE REDOX CYCLING PROCESS IS FAST AND INEXPENSIVE,PRODUCES ONLY SOLID WASTES,BUT REMOVES SMALL QUANTITIES OF DEPOSIT FROM MONEL ONLY. THE CAN-DECON PROCESS REMOVES DEPOSITS FROM MOST MATERIALS INCLUDING FUEL CLADDING AND HAS MANY OTHER ADVANTAGES./

CNA/AECL SYMPOSIUM/

PINAWA,MANITOBA,CANADA/

18 NOV 1974/

NP/

21.0400/

CANDU TYPE REACTORS:T1/DECONTAMINATION:Q2/PRIMARY COOLANT CIRCUITS:T2,D1/

13/0/0000001-0000077// 26

77C0054225 EDB-77-10 21.040

AECL--5113/

RESEARCH AND DEVELOPMENT ON ACTIVITY TRANSPORT/

MONTFORD,B.(ATOMIC ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT)/

ATOMIC ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT/

SEP 1975/

TIVITY TRANSPORT IN CANDU*S/
HLINSON,M.(ED.)/
D 653 000/
CA/
CA/
A1X-07:272587/ERA-02:026387/EDB-77:054225/
IN THIS PAPER THE OBJECTIVES OF RESEARCH ON ACTIVITY TRANSPORT FOR THE DEVELOPMENT OF MODELS OF THE TRANSPORT MECHANISMS, AND ULTIMATELY A CODE FOR PREDICTING ACTIVITY TRANSPORT IN PRESENT AND FUTURE REACTORS,ARE DISCUSSED.THE COMMUNICATIONS BETWEEN AECL LABORATORIES AND ONTARIO HYDRO*S POWER REACTORS, THE EXPERIMENTAL STUDIES,AND MODEL DEVELOPMENT ARE BRIEFLY OUTLINED./
CNA/AECL SYMPOSIUM/
PINAWA,MANITOBA,CANADA/
18 NOV 1974/
NP/
21.0400/
CANDU TYPE REACTORS:T1/DECONTAMINATION/DEPOSITS:Q1/FISSION PRODUCTS:Q1/OXIDES/PRIMARY COOLANT CIRCUITS/RADIOACTIVITY TRANSPORT/RESEARCH PROGRAMS/SOLUBILITY/

13/0/0000001-0000077// 27
77C0054140 EDB-77-10 21.010
AED-CONF--76-050-002/
OPERATIONAL EXPERIENCE WITH LIQUID WASTE PROCESSING SYSTEMS IN NUCLEAR POWER STATIONS WITH PWR AND BWR REACTORS.RECENT DEVELOPMENTS IN THESE FIELDS/
REININGER,S./
VGB TECHNISCHE VEREINIGUNG DER GROSSKRAFTWERKSBETREIBER E.V.,ESSEN (GERMANY,F.R.)/
1975/
GERMAN/
TIC/
VGB CONFERENCE *AUXILIARY COMPONENTS IN NUCLEAR POWER STATIONS* AND TECHNICAL PAPERS *SECTION B* AND *SECTION C*/
9 200 234/
DE/
DE/
A1X-07:263454/ERA-02:026323/EDB-77:054140/
WITH THE GROWING NUMBER OF NUCLEAR POWER STATIONS AND THE DEMAND FOR EVER LOWER EMISSION RATES NUCLEAR PROCESSING OF LIQUID WASTE IS GAINING IN IMPORTANCE.THE RESULTING INCREASED DEMANDS MADE ON LIQUID WASTE PROCESSING SHOULD,HOWEVER,NOT BE AT THE EXPENSE OF OPERATIONAL SAFETY AND AVAILABILITY OF THE PLANT.THE LIQUID WASTES - MOSTLY PRODUCED SPORADICALLY AND IN VARYING AMOUNTS IN THE CONTROLLED REGION OF POWER STATIONS - CAN BE CLASSIFIED AS WATERS FROM THE PRIMARY CIRCUIT AND WATERS FROM DECONTAMINATION AND PURIFICATION PROCESSES.LIKE THE ORIGIN OF THESE WATERS,THEIR QUALITY WITH REGARD TO RADIOACTIVITY AND CONTAMINATIONS AS WELL AS THE SOLID PARTICLE CONTENT DIFFER GREATLY.THE CLEANING AND DECONTAMINATION PROCEDURES ARE CHOSEN ACCORDING TO THE TYPES OF IMPURITIES.THE FOLLOWING WELL-TRIED REPROCESSING TECHNIQUES ARE OFTEN USED: MECHANICAL FILTRATION, THE PRECIPITATION-FLOCCULATION TECHNIQUE,ION EXCHANGE,WASTE EVAPORATION.AT THE MOMENT,THE LAST-MENTIONED TECHNIQUE YIELDS THE BEST RESULTS WITH REGARD TO TOTAL DECONTAMINATION./
14 FIGS.AVAILABLE FROM ZAED/
VGB CONFERENCE *AUXILIARY COMPONENTS IN NUCLEAR POWER STATIONS*/
ESSEN,F.R.GERMANY/
17 MAR 1976/
NP/
21:0100/21:0200/
BWR TYPE REACTORS:T1/DECONTAMINATION/LIQUID WASTES:Q1,Q2/PWR TYPE REACTORS:T2/RADIOACTIVE WASTES/WASTE PROCESSING:T, Q1,Q2/WATER/WATER CHEMISTRY/

13/0/0000001-0000077// 28 PAGE 13

77C0054139 EDB-77-10 21.010
AED-CONF--76-050-001/
OPERATIONAL EXPERIENCE WITH REACTOR COOLANT CLEAN-UP SYSTEMS IN NUCLEAR POWER STATIONS WITH PWR AND BWR REACTORS/
MILLE/
VGB TECHNISCHE VEREINIGUNG DER GROSSKRAFTWERKSBETREIBER E.V.,ESSEN (GERMANY,F.R.)/
1976/

CONFERENCE "AUXILIARY COMPONENTS IN NUCLEAR POWER STATIONS" TECHNICAL PAPERS SECTION - SUMMARY SECTION - 9-
234/

DE/

AIX-07:263958/ERA-02:026222/EDB-77:054139/

THE COOLANT CLEAN-UP SYSTEMS IN PWR AND BWR REACTORS REDUCE AND RETAIN CORROSION PRODUCTS AS WELL AS ACTIVITIES OF FISSION PRODUCTS AND ACTIVATED CORROSION PRODUCTS.FOR CLEANING,ION EXCHANGERS ARE USED IN BOTH TYPES OF REACTOR.PWR ION EXCHANGERS ARE SPHERICAL WHILE BWR-TYPE REACTORS EMPLOY POWDERED RESIN PRECOATINGS.FURTHERMORE,AN ADDITIONAL GAS STRIPPER IS INSTALLED IN PWR REACTORS.APART FROM THE DESIGN AND MODE OF ACTION OF THESE TWO REACTOR COOLANT CLEAN-UP SYSTEMS, THE TASKS OF THESE SYSTEMS DURING START-UP AND SHUTDOWN ARE DEAL WITH IN PARTICULAR.OPERATIONAL EXPERIENCE WITH PWR REACTORS ILLUSTRATES THE ADVANTAGES OF THE "ALKALINE" MODE OF OPERATION.MEASUREMENTS CARRIED OUT IN CONNECTION WITH PROBLEMS IN KEEPING THE PRIMARY COOLANT OF NUCLEAR POWER STATIONS CLEAN ARE DESCRIBED.THE INVESTIGATIONS DEALT WITH THE AMOUNT OF CORROSION PRODUCTS AND NOBLE GASES PRODUCED DURING SHUTDOWN AND WITH THE SWELLING OF THE FILTER TUBES./

2 FIGS.AVAILABLE FROM ZAED/

VGB CONFERENCE "AUXILIARY COMPONENTS IN NUCLEAR POWER STATIONS"/

ESSEN,F.R.GERMANY/

17 MAR 1976/

NP/

21.0100/21.0200/

BWR TYPE REACTORS: T1 /CLEANING/COOLANT CLEANUP SYSTEMS:T3.01,02/COOLANTS/CORROSION PRODUCTS/PERFORMANCE:D3/PWR TYPE REACTORS:T2/REACTOR COOLING SYSTEMS/

13/0/0000001-0000077// 29

77P0049618 EDB-77-09 22.030

VENTED FUEL ELEMENT FOR NUCLEAR REACTORS/

GATLEY,J.A./WEBB,J./GALLIE,R.R./

TO UKAEA LONDON OFFICE/

PATENT/

GERMAN(FRG)PATENT 2,514,977/C//

19 SEP 1974/

GERMAN/

DE/

DE/

AIX-08:287436/ERA-02:024551/EDB-77:049618/

THE FUEL ELEMENT CONSISTS OF FUEL RODS ARRANGED WITHIN A CLADDING TUBE WITH FISSION GAS PLENUM.A VENT PIPE IS PROVIDED FOR RELEASING THE FISSION GASES INTO THE COOLANT.THE VENT PIPE HAS A THROTTLING EFFECT ON THE FISSION GASES SO THAT SHORT-LIVED ISOTOPES MAY DECAY BEFORE ENTERING THE COOLANT.THE OPENING OF THE PIPE HAS THE SITE OF A CAPILLARY TUBE.ITS LENGTH AND OTHER DIMENSIONS DEPEND ON THE PROPERTIES OF THE REACTOR,AS,E.G.,THE AMOUNT OF FISSION PRODUCTS RELEASED, THE OPERATING TEMPERATURE,AND THE PERMISSIBLE RADIOACTIVITY.ITS LENGTH,HOWEVER,IS AT LEAST EQUAL TO THAT OF THE FUEL SPACE.ESPECIALLY,THE PIPE MAY BE DESIGNED AS A CAPILLARY TUBE COIL.FURTHERMORE,IT MAY CONTAIN A WASHING DEVICE WITH,E.G.,LIQUID SODIUM RETAINING,E.G.,CESIUM THAT OCCURS AS A FISSION PRODUCT./

5 FIGS./

22.0300/

CLEANING/DESIGN:D1/DUCTS/FISSION PRODUCTS/FUEL ELEMENTS:M1/OFF-GAS SYSTEMS/PIPES/SPIRAL CONFIGURATION/VENTS/

13/0/0000001-0000077// 30

77P0049589 EDB-77-09 22.020

METHOD AND DEVICE FOR REVERSING THE ROTATION DIRECTION OF A MEDIUM ON THE SECONDARY SIDE OF A HEAT EXCHANGER ESPECIALLY FOR POWER PLANTS WITH NUCLEAR REACTORS/

STITELER,F.Z./HONIGMANN,R.L./

TO COMBUSTION ENGINEERING,INC./

GERMAN(FRG)PATENT 2,515,268/A//

30 OCT 1975/

GERMAN/

US/

DE/

UNDARY SIDE OF THE TUBE BUNDLE AND COVER PLATE./
FIGS./
22.0200/
CLEANING/FLUID.FLOW/HEAT EXCHANGERS/POWER REACTORS:M1/STEAM GENERATORS:M,01/

13/0/0000001-0000077// 31
77P0047629 EDB-77-09 21.050
HED.-TC--157-2/
CAUSTIC CORROSION CONTROL IN SODIUM REMOVAL PROCESSES.PART 2/
BARTON,G.B./FUNK,C.W./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
CONTRACT E(45-1)-2170/
SEP 1976/
AT/
2.935-800/
US/
US/
ERA-02:024429/EDB-77:047629/
STANDARD STRESSED, SLEEVED, TENSILE SPECIMENS WERE USED TO INVESTIGATE WHETHER OR NOT STRESS CORROSION CRACKS WERE GENERATED BY THE PROCESS OF SODIUM REMOVAL BY MOIST NITROGEN (WVN PROCESS).ALSO THE RANGE OF CONDITIONS THAT WOULD INDUCE SCC WAS PARTIALLY EXPLORED.THE WVN PROCESS CAN BE USED TO REMOVE SODIUM FROM ARTICLES OF 304 SS WITHOUT CAUSING STRESS CORROSION CRACKING. CRACKS ARE GENERATED AT HIGHER TEMPERATURES AND LONGER TIMES OF EXPOSURE THAN THE PROCESS REQUIRES.IT APPEARS THAT SAFE WORKING LIMITS CAN BE SPECIFIED./
OTHER/
P/
21.0500/
CLEANING:-02 / CORROSION PROTECTION:-02 /CRACKS/LMFBR TYPE REACTORS:T1/REACTOR COMPONENTS:T2,01/REMOVAL/SODIUM/STRESS CORROSION/

13/0/0000001-0000077// 32
77P0047566 EDB-77-09 21.020
NUCLEAR-REACTOR STEAM GENERATOR/
SPITELER,F.E./DONOHUE,J.P./
TO COMBUSTION ENGINEERING,INC./
FRENCH PATENT 2,273,349/A//
17 MAR 1975/
FRENCH/
US/
FR/
AIX-08:287413/ERA-02:024362/EDB-77:047566/
THE INVENTION RELATES TO STEAM-GENERATORS.IT DEALS WITH AN INSTALLATION IN WHICH AUXILIARY DEMINERALIZATION DEVICES PERMIT TO TREAT A CONTINUOUS DRAINING FLOW WHENEVER THE STEAM-GENERATORS HAVE LEAKAGES BETWEEN THE PRIMARY AND SECONDARY CIRCUITS, THE PRIMARY CIRCUIT BEING RADIOACTIVE IN VIEW OF ITS CIRCULATING THROUGH A NUCLEAR-REACTOR.THIS CAN BE APPLIED TO THE STEAM-GENERATORS OF NUCLEAR POWER-STATIONS./
AVAILABLE FROM INSTITUT NATIONAL DE LA PROPRIETE INDUSTRIELLE,PARIS (FRANCE)/PRIORITY CLAIM:19 MAR 1974,US/
21.0200/
COOLANT CLEANUP SYSTEMS:M3,02/COOLANTS/DECONTAMINATION/DEMINERALIZATION/DESIGN:03/LEAKS/PWR TYPE REACTORS:M1/SECONDARY COOLANT CIRCUITS/STEAM GENERATORS:M2,01/

13/0/0000001-0000077// 33

77J0047554 EDB-77-09 21.010
ULTRASONIC RESIN CLEANER/
NOMI,M./SHIMOGORI,M./MIYAZOE,T.(EBARA MFG.CO.LTD.,TOKYO (JAPAN))/
BWR/
EBARA JIHO/94/DEC 1975/
29-33/

08:200645/ERA-02:024043/EDB-77:047554/
THE BOILING WATER REACTOR,THE PRODUCED STEAM IS FED DIRECTLY TO THE TURBINE TO GENERATE POWER.THIS STEAM IS COOLED AND IS CLEANED BY THE CONDENSATE DEMINERALIZER.HOWEVER,THE IRON OXIDES AND HYDROXIDES (REFERRED TO AS "CRUD") USUALLY ADHERE TO THE ION EXCHANGE RESIN IN THE CONDENSATE DEMINERALIZER SO STRONGLY THAT THEY CANNOT BE EASILY REMOVED BY CHEMICAL REGENERATION.TO OVERCOME THIS DIFFICULTY,ULTRASONIC WAVES HAVE BEEN TRIED OUT TO PHYSICALLY CLEAN UP THE RESIN BEADS.THE BASIC EXPERIMENT HAS REVEALED THAT THE CRUD CAN BE EASILY REMOVED FROM THE RESIN SURFACES,AND THE OPTIMUM WAVE FREQUENCY FOR THIS PROCESS HAS BEEN OBTAINED. BASED ON A SERIES OF BASIC TESTS,EXPERIMENTAL CONTINUOUS PROCESSING EQUIPMENT OF BOTH SMALL AND MEDIUM SCALES WERE ASSEMBLED.WITH THESE PILOT UNITS,THE WHOLE PROCESS IS AUTOMATICALLY CONTROLLED AND THE CONTINUOUS SEPARATION OF CLEANED RESIN BEADS FROM THE CRUD AND BACKWASH WATER IS EASILY ACHIEVED.THE TEST RESULTS HAVE WELL PROVED THAT THIS METHOD CAN BE SATISFACTORILY PUT INTO PRACTICAL USE TO SUBSTANTIALLY REDUCE THE PRODUCTION OF CHEMICAL WASTES WHICH ARE DIFFICULT TO TREAT./
21.0100/
AUTOMATION / BWR-TYPE REACTORS:T1/CLEANING:Q3/COOLANT CLEANUP SYSTEMS:H2,Q1/DEMINERALIZATION/ION EXCHANGE/ION EXCHANGE MATERIALS/KHZ RANGE 01-100/RESINS:M3,Q2/SPECIFICATIONS/ULTRASONIC WAVES/VAPOR CONDENSERS/

13/0/0000001-0000077// 34
77R0043137 EDB-77-08 22.060
HEDL-TC--157/
CAUSTIC CORROSION CONTROL IN SODIUM REMOVAL PROCESSES/
BARTON,G.B./FUNK,C.W./BALLIF,J.C./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
CONTRACT E(45-1)-2170/
NOV 1974/
AT/
2 906 800/
US/
US/
ERA-02:022501/EDB-77:043137/
THE CONTROL OF THE CORROSION OF FFTF COMPONENTS PROCESSED FOR SODIUM REMOVAL PRIOR TO INSPECTION,REPAIR,AND REUSE IS REQUIRED. STUDY OF THE CONDITIONS THAT CONTRIBUTE TO STRESS CORROSION CRACKING SHOULD MAKE IT POSSIBLE TO MINIMIZE ADVERSE EFFECTS BY THE SODIUM REMOVAL PROCESS.OF THE THREE PHASES OF EXPOSURE,NAMELY DRAINED SURFACES WITH ONLY FILMS OF SODIUM HYDROXIDE SOLUTION,SURFACES IMMERSED IN SODIUM HYDROXIDE SOLUTION AND SURFACES REIMMERSED IN A MIXTURE OF SODIUM AND SODIUM HYDROXIDE, THE PRESENT STUDY WAS CONCENTRATED ON THE SURFACES IMMERSED IN SODIUM HYDROXIDE SOLUTION.IT WAS FOUND THAT SURFACES WITH UNRESTRICTED ACCESS TO THE SOLUTION WERE SUBJECT TO HEAVY GENERAL CORROSION BUT NOT TO STRESS CORROSION CRACKING WHEN THE SOLUTION WAS AT ATMOSPHERIC PRESSURE AND THE TEMPERATURE LESS THAN 300 F.RESTRICTED ACCESS TO PART OF A SPECIMEN SURFACE GREATLY INCREASED THE PROBABILITY OF CRACKS DEVELOPING IN HOT CONCENTRATED SODIUM HYDROXIDE SOLUTIONS. APPLICATION OF A CLOSE FITTING SLEEVE AROUND THE REDUCED SECTION OF A STANDARD TENSILE BAR CONSISTENTLY FORMED CRACKS. WITH A SUITABLE STANDARDIZED TEST SPECIMEN IT WILL BE POSSIBLE TO MORE CLEARLY DEFINE THE CONDITIONS THAT INDUCE CORROSION CRACKING./
OTHER/
P/
22.0600/
CLEANING/CORROSION/CORROSION PROTECTION/FFTF REACTOR:T1/REACTOR COMPONENTS:Q1/SODIUM/STRESS CORROSION/

13/0/0000001-0000077// 35
77P0041809 EDB-77-08 21.050
APPARATUS FOR INTRODUCING SODIUM INTO A REACTOR VESSEL/
NAITO,K./

13/0/0000001-0000077// 35 CONTINUATION 1 PAGE 16
TO HITACHI LTD./
PATENT/
JAPANESE PATENT 1974-47,240/B//
7 OCT 1969/
JAPANESE/
JP/

INVENTION. A CLOSED COMBUSTION TANK CONTAINING SODIUM FOR COMBUSTION COMPRISES A HEATER FOR KEEPING THE SODIUM IN MOLTEN STATE AND MEANS FOR STIRRING THE MOLTEN SODIUM.THE AIR IN THE VESSEL IS FED TO THE TANK THROUGH A PIPE BY MEANS OF A BLOWER WHILE A GAS EXHAUSTED FROM THE TANK IS INTRODUCED INTO THE VESSEL AND DISCHARGED IN THE VICINITY OF A REACTOR MACHINE STRUCTURE IN THE VESSEL. THUS,A PASSAGE FOR CIRCULATING THE AIR IN THE VESSEL IS FORMED BETWEEN THE VESSEL AND COMBUSTION TANK TO FACILITATE, THE CONTACT BETWEEN THE MOLTEN SODIUM AND AIR.THE OXYGEN IN THE AIR IS THEREFORE COMPLETELY REMOVED IN THE REACTION WITH THE MOLTEN SODIUM AND THE SODIUM OXIDES ARE CAPTURED THROUGH A TRAP INSERTED IN THE CIRCULATING PASSAGE.THE COMBUSTION HEAT GENERATED IS TRANSFERRED WITH THE EXHAUST GAS INTO THE VESSEL TO PREHEAT THE REACTOR MACHINE STRUCTURE.SINCE THE OXYGEN IN THE VESSEL IS REMOVED AND THE REACTOR MACHINE STRUCTURE IS PREHEATED, THE MOLTEN SODIUM IS SAFELY INTRODUCED INTO THE VESSEL WITHOUT CAUSING ABRUPT TEMPERATURE RISE IN THIS STRUCTURE//

21.0500/
AIR /CLEANING/COMBUSTION HEAT/CONTAINERS/COOLANT LOOPS/HEATERS/OXYGEN/REACTOR VESSELS:M,01/SAFETY/SODIUM/SODIUM COOLED REACTORS:M1/VENTILATION/

13/0/0000001-0000077// 36
77X0041770 EDB-77-08 21.050
AI-ERDA--13174/
SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS.QUARTERLY TECHNICAL PROGRESS REPORT,APRIL--JUNE 1976/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
CONTRACT E(04-3)-0824/
1976/
AT/
9 500 331/
US/
US/
ERA-02:022256/EDB-77:041770/
PROGRESS IS REPORTED ON SODIUM REMOVAL AND DECONTAMINATION OF COMPONENTS AND ON THE FFTF-LMFBR SEAL TEST PROGRAM./
OTHER/
P/
21.0500/36.0105/
CLINCH RIVER BREEDER REACTOR:T7/CORROSION:06/CORROSIVE EFFECTS/COVER GAS/DECONTAMINATION:04/FFTF REACTOR:T8/LMFBR TYPE REACTORS: T1/PERFORMANCE TESTING:G2/REACTOR COMPONENTS:M4,01/REACTOR COOLING SYSTEMS:M3,01/REMOVAL:Q5/RESEARCH PROGRAMS/ SEALS:*2,03,07,08/SODIUM:M5/STAINLESS STEEL-304:M5/SURFACE CLEANING/

13/0/0000001-0000077// 37
77P0029757 EDB-77-06 21.020
LIGHT WATER COOLED REACTOR/
KAUSZ,I./STUENKEL,H./WILLE,H./
TO SIEMENS A.G.,BERLIN (F.R.GERMANY)/SIEMENS A.G.,MUENCHEN (F.R.GERMANY)/
PATENT/
GERMAN(FRG)PATENT 2,300,185/B//
31 OCT 1974/
GERMAN/
DE/
DE/
AIX-07:271188/ERA-02:016439/EDB-77:029757/
THE LIGHT-WATER COOLED PWR HAS A REACTOR WATER TREATMENT SYSTEM IN A BYPASS TO THE MAIN COOLANT PUMP.IT CONTAINS,AMONG OTHER THINGS, A TRITIUM REMOVAL DEVICE WITH A THROUGHPUT OF,E.G.,0.5 PERCENT OF THE TOTAL AMOUNT OF COOLANT.THE TRITIUM

13/0/0000001-0000077// 37 CONTINUATION 1 PAGE 17

REMOVAL DEVICE CONSISTS OF A WATER STRIPPING TOWER OR A TWO-TEMPERATURE EXCHANGING SYSTEM.WITH IT,THE TRITIUM CONTENT OF THE COOLANT IS KEPT AT, E. G. ,0.2 CI/M T INDEPENDENTLY OF THE OPERATIONAL TIME OF THE REACTOR.FOR WATER FROM SMALL LEAKAGES GETTING INTO THE WASTE WATER,ADDITIONAL TREATMENT IS NO LONGER NECESSARY./
INT.CL.G21C,19/30/GERMAN (F.R.)CL.21G,21/20/
2 FIGS./
21.0200/

023679 EDB-77-05 21.050
DIATION MONITORING AND MISCELLANEOUS FACILITIES OF THE JAPANESE EXPERIMENTAL FAST REACTOR "JOYO"/
RINOSHITA,M./MAEKAWA,Y./ETOH,F./MORISHITA,K.(FUJI ELECTRIC CO.LTD.,TOKYO (JAPAN))/
FUJI JIHO/46/7/JUL 1975/
429-434/
JAPANESE/
JP/
JP/
FUJIA/
AIX-07:273708/ERA-02:016520/EDB-77:023679/
THE EXPERIMENTAL FAST REACTOR JOYO HAS BEEN INSTALLED AT OARAI ENGINEERING CENTER OF POWER REACTOR AND NUCLEAR FUEL DEVELOPMENT CORPORATION AS A LINK IN JAPAN'S NEW POWER REACTOR DEVELOPMENT PROGRAM.IT IS COOLED WITH SODIUM AND USES MIXED PLUTONIUM / URANIUM OXIDE FUEL. AFTER THE COMPLETION OF THE INSTALLATION OF FACILITIES AND THE TEST OF VARIOUS SYSTEMS, OVERALL FUNCTIONAL TESTS ARE IN PROGRESS. OF THOSE FACILITIES DESIGNED AND CONSTRUCTED BY FUJI ELECTRIC MANUFACTURING CO., THE SPECIFICATIONS AND FEATURES OF THE FOLLOWING FACILITIES ARE DESCRIBED: HEALTH-PHYSICS INSTRUMENTATION,ELECTRIC EQUIPMENT,AND MAINTENANCE FACILITIES./
21.0500/
DECONTAMINATION/JOYO REACTOR:TI/POWER SUPPLIES/RADIATION MONITORING/RADIATION MONITORS:DI/RADIATION PROTECTION/REACTOR INSTRUMENTATION/REACTOR MAINTENANCE/WASHOUT/

13/0/0000001-0000077// 39
77J0023673 EDB-77-05 21.050
RESEARCH AND DEVELOPMENT OF THE FUEL-EXCHANGE IN-REACTOR RELAY SYSTEM FOR THE PROTOTYPE FAST BREEDER "MONJU"/
KITAGAWA,H./IIDA,S.(POWER REACTOR AND NUCLEAR FUEL DEVELOPMENT CORP.,TOKYO (JAPAN))/
DOKYOKURO GIHO/14/MAY 1975/
21-53/
JAPANESE/
JP/
JP/
DOYGA/
AIX-07:263531/ERA-02:016513/EDB-77:023673/
FOR FUEL EXCHANGE, THE UNDER-THE-PLUG METHOD IS EMPLOYED IN THE PROTOTYPE FAST BREEDER "MONJU" BEING DEVELOPED IN JAPAN.THE FUEL TRANSFER ROUTE IS COMMONLY USED FOR BOTH NEW AND SPENT FUELS BECAUSE OF THE LIMITATION IN SPACE AND COST. ONE POT EACH FOR BOTH FUELS ARE PROVIDED IN THE REACTOR VESSEL,AND THESE TWO ARE ROTATED BY 180 DEGREES TO REDUCE THE WAITING TIME OF FUEL EGRESS-INGRESS AND EXCHANGE UNITS.THE RELAY SYSTEM FOR THE PURPOSE,CONSTRUCTED FOR TRIAL,AND THE RESULTS OF ITS TEST ARE DESCRIBED. THE SYSTEM INCLUDING TRANSFER RACK,GRIPPER AND DOOR VALVE WAS FOUND TO FUNCTION NORMALLY.MATERIAL CHARACTERISTICS OF THE SYSTEM WERE ALSO SATISFACTORY./
21.0500/
CLEANING / LIQUID METALS /MOCKUP/MONJU REACTOR:T,TI/PERFORMANCE TESTING/REACTOR CHARGING MACHINES/REACTOR FUELING:DI/ SODIUM/

13/0/0000001-0000077// 40
77P0023599 EDB-77-05 21.030
METHOD FOR THE CLEANING OF THE COOLANT GAS FLOW OF REACTORS AND EQUIPMENT FOR THE REALIZATION OF THE METHOD/
FRENCH,J.E./STEYER,K.D./WESSMAN,G.L./
TO ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,WASHINGTON,D.C.(USA)/
GERMAN(FRG)PATENT 2,514,975/B//
27 JUN 1974/

13/0/0000001-0000077// 40 CONTINUATION 1 PAGE 18

GERMAN/
US/
DE/
AIX-07:271214/ERA-02:016510/EDB-77:023599/
THE CLEANING OF THE COOLANT GAS FLOW OF A HTGR FROM FISSION PRODUCTS IS DONE BY DELAYING THE GAS FLOW IN DELAY BEDS (ADSORBERS) BY CONTINUOUS ADSORPTION AND DESORPTION.THE FISSION PRODUCTS WHICH MAINLY OCCUR ARE SUP(87,88,89)KR,SUP(88,

PRODUCED BY THE DECAY OF THE FISSION PRODUCTS DOES NOT [illegible] EXCHANGERS, ARE CONNECTED BETWEEN THE ADSORBERS WHICH [illegible] DOWN THE COOLANT GAS FLOW AGAIN TO 94 [illegible] ACTIVATED CARBON IS SUITABLE AS ADSORPTION MATERIAL WITH A DENSITY OF 0.40 TO 0.60 G/ML AND A GRAIN SIZE DISTRIBUTION OF 5 X 10 TYLER./

INT.CL.G21D,3/09/GERMAN (F.R.)CL.21G,21/20/

1 FIG./4 TABS./

21.0300/

ACTIVATED CARBON/ADSORPTION/BARIUM 137/CESIUM 137/CLEANING/COOLANT CLEANUP SYSTEMS:M,DI/FISSION PRODUCTS/GAS FLOW/HEAT EXCHANGERS/HTGR TYPE REACTORS:M1/ISOMERIC NUCLEI/XENON 137/

13/0/0000001-0000077// 41

77C0023589 EDB-77-05 21.030

AED-CONF--75-553-039/

DEVELOPMENT OF A DECONTAMINATION METHOD FOR THE PRIMARY COOLANT CIRCUIT OF A HTGR TYPE REACTOR/

SCHENKER,E./LOEWENSCHUSS,H./ULLRICH,G./WIEDEMANN,K.H./

EIDGENOESSISCHES INST.FUER REAKTORFORSCHUNG,WUERENLINGEN (SWITZERLAND)/

1975/

FRENCH/

IAEA-SM--200/4/

INIS/

2 314 000/

DE/

DE/

AIX-07:252369/ERA-02:016501/EDB-77:023589/

SEVERAL GROUPS HAVE BEEN WORKING ON THE DEVELOPMENT OF A COOLING SYSTEM DECONTAMINATION PROCESS FOR AN HTGR REACTOR. ENCOURAGING RESULTS HAVE ALREADY OBTAINED:ONE METHOD WAS DEVELOPED FOR THE "OUT OF PILE" CHARGING WITH T JCS, T XCS AND SUP(110M)AG.THE FORCE OF ADHESION OF CESIUM TO THE CHARGED SAMPLES "OUT OF PILE" CAN BE COMPARED TO THAT OF THE "IN-PILE" PRODUCED SAMPLES.THE TESTS "IN-PILE" SHOWED THAT THE QUALITATIVE AND QUANTITATIVE CONTAMINATION DEPENDS ON THE MATERIAL AND ON THE STATE OF THE SURFACE OF THE LATTER.THE TREATMENTS OF THESE SAMPLES IN SOLUTION CONTAINING OXIDIZING AGENTS AND SUBSTANCES WITH COMPLEX FORMATIONS HAVE LED TO DECONTAMINATION FACTORS OF MORE THAN 100 FOR A TOLERABLE DEGREE OF CORROSION OF THE MATERIAL.PARALLEL TO THESE TESTS,THE CORROSION OF THE MATERIALS WAS INVESTIGATED USING ELECTROCHEMICAL METHODS ESPECIALLY THE CONTACT CORROSION AND THAT IN CRACKS.RESULTS HAVE ALREADY BEEN OBTAINED FOR THE INTERACTIONS BETWEEN THE HELIUM CONTAMINATIONS AND METALLIC MATERIALS.EFFORTS HAVE STARTED WITH THE DEFINITION OF MECHANICAL QUALITIES BEFORE AND AFTER DECONTAMINATION TREATMENT PARTICULARLY UNDER ALTERNATE STRESSES./

4 FIGS./6 TABS./5 REFS:WITH ABSTRACT.AVAILABLE FROM THE IAEA/

INTERNATIONAL SYMPOSIUM ON GAS-COOLED REACTORS WITH EMPHASIS ON ADVANCED SYSTEMS/

JUELICH,GER./

13 OCT 1975/

MP/

21.0300/

ADHESION/CESIUM 134/CESIUM 137/COOLANT CLEANUP SYSTEMS:T,DI/DECONTAMINATION/HELIUM/HTGR TYPE REACTORS:M1/PRIMARY COOLANT CIRCUITS/SILVER 110/

13/0/0000001-0000077// 42

77P0023528 EDB-77-05 21.020

NUCLEAR PRESSURIZED WATER REACTOR/

WEBER,R./

TO SIEMENS A.G.,BERLIN (F.R.GERMANY)/SIEMENS A.G.,MUENCHEN (F.R.GERMANY)/

PATENT/

GERMAN(FRG)PATENT 2,258,741/A//

12 JUN 1974/

GERMAN/

DE/

DE/

AIX-07:271202/ERA-02:016430/EDB-77:023528/

THE CORE OF THE PWR IS PLACED IN A SPHERICAL STEEL CONTAINMENT AND AN OUTER CONCRETE SHIELD ENWRAPPING IT.IN ORDER TO

ELD. THE FUEL PIT IS CONNECTED BY A SLUICE GATE WITH A HI NG CAVITY IN THE CORE.THE SLUICE GATE IS DESIGNED AS A
IZONTALLY RUNNING TUBE OR AS AN INCLINED HOIST.IT IS SITUAL ELOW THE EQUATOR OF THE CONTAINMENT.AN EQUIPMENT HATCH
OR A SEPARATE CRANE BUILDING IN OR OUTSIDE OF THE CONCRETE SHIELD SERVES TO LOAD AND UNLOAD THE FUEL ELEMENTS.THIS CRANE
BUILDING MAY BE LINKED UP WITH A DECONTAMINATION WORKSHOP./
INT.CL.G21D.1/00/GERMAN (F.R.)CL.21G.21/20/
5 FIGS./
21.0200/
CONTAINMENT BUILDINGS/DECONTAMINATION/FUEL ELEMENTS/FUEL MANAGEMENT/PWR TYPE REACTORS(M)/SHIELDS/SUPPORTS/TRANSPORT/

13/0/0000001-0000077// 43
77J0023491 EDB-77-05 21.010
SOLUTION OF PROBLEMS AT LINGEN NUCLEAR POWER STATION/
DEUBLEIN,D.(KERNKRAFTWERK LINGEN G.M.B.H.,DARME/LINGEN (F.R.GERMANY))/
VGB KRAFTWERKSTECH./55/1/JAN-1976/
13-17/
GERMAN/
DE/
DE/
VGE<B/
ATX-07:263448/ERA-02:016386/EDB-77:023491/
LINGEN NUCLEAR POWER STATION HAS BEEN IN OPERATION SINCE 1968. THE MONITORING EQUIPMENT FOR THE DISCHARGE OF
RADIOACTIVE MATERIALS HAS BEEN CONSIDERABLY IMPROVED. MECHANICAL HANDLING MACHINES HAVE BEEN INSTALLED FOR THE
DECONTAMINATION OF THE LARGER COMPONENTS.ALL PROBLEMS HAVE BEEN SOLVED IN THE CLOSEST COLLABORATION WITH THE RESPECTIVE
FIRMS./
8 FIGS./2 REFS./
21.0100/
DECONTAMINATION /GASEOUS WASTES/LINGEN REACTOR:T/LIQUID WASTES/PERSONNEL MONITORING/RADIOACTIVE WASTE DISPOSAL/REACTOR
COMPONENTS/REACTOR MAINTENANCE/REPAIR/

13/0/0000001-0000077// 44
77J0023461 EDB-77-05 21.000
DECONTAMINATION IN NUCLEAR POWER PLANTS/
SCHROEDER,H.J.(RHEINISCH-WESTFAELISCHES ELEKTRIZITAETSWERK A.G.,BIBLIS (F.R.GERMANY).BETRIEBS/VERWALTUNG)/
VGB KRAFTWERKSTECH./5675/MAY 1975/
353-357/
GERMAN/
DE/
DE/
VGB<B/
ATX-07:263440/ERA-02:016352/EDB-77:023461/
THE CONTRIBUTION DOES NOT GIVE DIRECTIONS FOR PHYSICAL OR CHEMICAL DECONTAMINATION METHODS.IT TRIES TO DESCRIBE THE
STATE OF TECHNOLOGY BRIEFLY,AND TO POINT TO TECHNICAL AND ORGANIZATIONAL PROBLEMS IN CONNECTION WITH DECONTAMINATIONS
WHICH PRESENT THEMSELVES TO THE OPERATORS OF NUCLEAR POWER PLANTS AS WELL AS TO FIRMS INTERESTED IN THIS KIND OF WORK./
1 TAB./17 REFS./
21.0000/
DECONTAMINATION:G1/NUCLEAR POWER PLANTS:T1/REACTOR COMPONENTS/REACTOR MAINTENANCE/REACTOR OPERATION/REPAIR/REVIEWS/

13/0/0000001-0000077// 45

77J0018755 EDB-77-04 36.010
METALLIC SODIUM AS A COOLANT OF FAST NUCLEAR REACTORS,(2)/
ATSUMI,M.(POWER REACTOR AND NUCLEAR FUEL DEVELOPMENT CORP.,OARAI,IBARAKI (JAPAN).OARAI ENGINEERING CENTER)/
SHIN KINZOKU KOGYO/20/2/FEB 1975/
39-48/
JAPANESE/

-07:259756/ERA-02:014153/EDB-77:018755/
[illegible] ARE GIVEN ON ALL THE SODIUM LOOPS IN JAPAN AND MOST [illegible] SODIUM LOOPS ALL OVER THE WORLD.NAME AND PURPOSE OF THE LOOPS, TIME OF ESTABLISHMENT,HIGHEST TEMPERATURE,AMOUNT OF SODIUM,FLOW RATE,THE MATERIALS USED FOR THE CONSTRUCTION OF THE LOOPS,AND THE DIAMETER OF THE MAIN PIPINGS ARE GIVEN.ALSO,THE PROBLEMS RELATED WITH THESE LOOPS ARE DISCUSSED.FOR EXAMPLE, THE HIGH TEMPERATURE SODIUM FACILITY AT HEDL-WADCO WAS MADE FOR THE FFTF COMPONENT TEST AND INSTRUMENT TEST,AND USES 50, 000 GALLONS OF METALLIC SODIUM.THE HIGHEST TEMPERATURE IS 590 C.THE SODIUM FLOWS AT THE RATE OF 50 G/M.THE BODY IS MADE OF TYPE 304 STAINLESS STEEL.MAIN DATA OF EXISTING SODIUM-COOLED REACTORS IN THE WORLD ARE ALSO TABULATED. THE DATA INCLUDE THERMAL OUTPUT, ELECTRIC OUTPUT,THE STRUCTURE OF THE REACTOR CORES,THE DIMENSIONS OF THE CORES,FUEL USED, THE HIGHEST TEMPERATURE IN THE REACTORS, THE TEMPERATURE OF SODIUM AT THE INLET AND OUTLET,THE RATE OF MULTIPLICATION, THE AMOUNT OF SODIUM USED,NUMBER OF CONTROL RODS,NUMBER OF HEAT EXCHANGERS,AND THE PRESSURE OF STEAM.THE MONJU TYPE NUCLEAR REACTOR IN JAPAN USES 1,800 TON OF SODIUM./
36.0104/22.0200/21.0500/
COOLANTS / DATA: Q1, Q2/DECONTAMINATION/IMPURITIES/LIQUID METALS/PURIFICATION/REACTOR COOLING SYSTEMS/SODIUM:T2/SODIUM COOLED REACTORS:T1/

13/0/0000001-0000077// 46
77EC017883 EDB-77-04 22.020
NUCLEAR FACILITIES. SURFACE CLEANLINESS OF COMPONENTS. CLEANING AND PRESERVING OF FLUID SYSTEMS AND ASSOCIATED COMPONENTS.DRAFT/
BEUTH/BERLIN,F.R.GERMANY/FEB 1976/
GERMAN/
DIN--25410(PT.2)/
DE/
DE/
AIX-07:260675/ERA-02:013361/EDB-77:017883/
THE SPECIFICATION OF THIS STANDARD ARE VALID FOR THE CLEANLINESS OF THE SURFACES OF FLUID SYSTEMS AND PART SYSTEMS (INCLUDING THE SYSTEM COMPONENTS SUCH AS,E.G.,PIPELINES,PUMPS,ACCESSORIES,HEAT EXCHANGERS)COMING INTO CONTACT WITH THE MEDIUM IN NUCLEAR FACILITIES.THE FIELD OF APPLICATIONS EXTENDS TO THOSE CYCLE SYSTEMS WHOSE CLEANLINESS IS IMPORTANT FOR THE OPERATION OF THE NUCLEAR FACILITY.THE STANDARD CONTAINS SPECIFICATIONS FOR THE PLANNING,PERFORMANCE,CONTROL AND DOCUMENTATION OF THE CLEANING AND PRESERVING OF FLUID SYSTEMS AND INDICATES THE REQUIREMENTS OF THE CLEANING AND PRESERVING AGENTS. THESE SPECIFICATIONS ARE NECESSARY FOR THE QUALITY CONTROL OF FLUID SYSTEMS AND ARE TO ENSURE THAT NON-PERMITTED IMPURITIES IN THE FLUID SYSTEMS ARE REMOVED AND THE CLEANLINESS OF ALREADY CLEANED SURFACES OF COMPONENTS AND PART SYSTEMS IS MAINTAINED./
KERNTECHNISCHE ANLAGEN. OBERFLAECHENSAUBERKEIT VON BAUTEILEN. REINIGUNG UND KONSERVIERUNG VON KREISLAUFSYSTEMEN EINSCHLIESSLICH ZUGEHOERIGER KOMPONENTEN.ENTWURF/
22.0200/
DECONTAMINATION / GERMAN FEDERAL REPUBLIC/NUCLEAR FACILITIES/OPERATION/QUALITY ASSURANCE/REACTOR COMPONENTS:T1/REACTOR COOLING SYSTEMS/SPECIFICATIONS/STANDARDS:Q2/SURFACE CLEANING:Q1,T2/

13/0/0000001-0000077// 47
77JC017603 EDB-77-04 21.020
EXPERIENCE OF **IN-SERVICE** CLEANING OF THE SECOND LOOP OF THE STEAM GENERATOR OF THE NOVOVORONEZHSKAYA NUCLEAR POWER PLANT/
MONAKHOV,A.S./MARGULOVA,T.KH./VORONOV,V.N./KOTOV,A.V./ISAKOV,N.A./KRUGLOV,V.P./SOTNIKOV,A.F./PLOTNIKOV,I.M./
MOSCOW POWER ENG.INST./
TEPLOENERGETIKA (MOSCOW)/3/MAR 1976/
11-13/
RUSSIAN/
SU/

13/0/0000001-0000077// 47 CONTINUATION 1 PAGE 21

SU/
TPLOA/
ERA-02:013060/EDB-77:017603/
A METHOD OF COMPLEXING AGENT DOSAGE DURING **IN-SERVICE** CLEANING IS TESTED ON ONE OF THE STEAM GENERATORS OF THE NOVOVORONEZZHSKAYA NUCLEAR POWER PLANT.THE TESTS SHOW THAT IRON COMPLEXES ARE STABLE WHEN PH OF PURGE WATER IS LESS THAN 10.2.THEREFORE,MONOSUBSTITUTED EDTA SALTS ARE SUITABLE FOR **IN-SERVICE** CLEANING./

017597 EDB-77-04 21.020
CHEMICAL DECONTAMINATION OF THE AUXILIARY LIQUID WASTES FROM PWR NUCLEAR POWER STATION/
CHAUVET,P.(CEA CENTRE D'ETUDES NUCLEAIRES DE CADARACHE,13 - SAINT-PAUL-LES-DURANCE (FRANCE).DEPT.DE CHIMIE APPLIQUEE)/
BULL.INF.SCI.TECH.(PARIS)/212/MAR 1976/
79-84/
FRENCH/
FR/
FR/
BU122/
A1X-07:261036/ERA-02:013054/EDB-77:017597/
A CHEMICAL DECONTAMINATION PROCESS HAS BEEN PERFECTED TO ENSURE THE TREATMENT OF AERATED LIQUID RADIOACTIVE WASTES ARISING FROM FACILITIES USED IN NUCLEAR PRESSURIZED WATER REACTORS.BASED ON CHEMICAL PRECIPITATION OF VARIOUS REAGENTS: BARIUM SULPHATE,NICKEL FERROCYANIDE,FERRIC HYDROXYDE.THE PROCESS IS CONDUCTED AT A FINAL PH SET BETWEEN 9 AND 10.APPLIED TO LIQUID RADIOACTIVE WASTES PRODUCED BY THE NUCLEAR POWER STATION OF CHOOZ,THIS PROCESS HAS SHOWN A VERY HIGH EFFICIENCY: THE SPECIFIC ACTIVITY FOR EACH OF THE RADIONUCLIDES PRESENT IN THE EFFLUENT TREATED IS LOWERED BELOW THE MPC FOR THE POPULATION. WITH AGREEMENT OF SENA (SOCIETE D'ENERGIE NUCLEAIRE DES ARDENNES),THE OWNER OF THE CHOOZ STATION,A LONG DURATION EXPERIMENTATION IS NOW CONDUCTED AT CHOOZ./
21.0200/
BARIUM SULFATES/ COPRECIPITATION/DECONTAMINATION:Q1/FERROCYANIDES/FISSION PRODUCTS/IRON HYDROXIDES/LIQUID WASTES/PWR TYPE REACTORS:T1/RADIOACTIVE WASTE PROCESSING/

13/0/0000001-0000077// 49
77C017544 EDB-77-04 21.010
SEPARATION OF INERT FISSION GASES FROM OFF-GASES FROM NUCLEAR POWER PLANTS BY LOW-TEMPERATURE DISTILLATION/
GLATTHAAR,R.(LINDE A.G.,HOELLRIEGELSKREUTH/MUENCHEN (F.R.GERMANY).WERKSGRUPPE TIEFTEMPERATUR UND VERFAHRENSTECHNIKT/
ZAED/EGGENSTEIN-LEOPOLDSHAFEN,F.R.GERMANY/1976/
GERMAN/
AED-CONF--76-013-085/
REACTOR CONFERENCE,DUESSELDORF,30.3.-2.4.1976.SECTION 2:FUEL ELEMENTS,FUEL CYCLE AND ISOTOPE TECHNIQUE/
DE/
DE/
A1X-07:240629/ERA-02:012997/EDB-77:017544/
NONE/
REAKTORTAGUNG,DUESSELDORF,30.3.-2.4.1976.SEKTION 2:BRENNELEMENTE UND BRENNSTOFFKREISLAUF/
2 FIGS./5 REFS.SHORT COMMUNICATION ONLY/
REACTOR MEETING/
DUESSELDORF,F.R.GERMANY/
30 MAR 1976/
21.0100/21.0200/
B.R TYPE REACTORS:T1/DECONTAMINATION/DISTILLATION/EFFICIENCY/FREEZING OUT/KRYPTON 85/LOW TEMPERATURE/OFF-GAS SYSTEMS: Q1,Q2,T/PWR TYPE REACTORS:T2/

13/0/0000001-0000077// 50
77J0006516 EDB-77-02 22.050
RELEASE AND DEPOSITION OF FISSION PRODUCTS IN HIGH TEMPERATURE REACTORS/
MIELKEN,G./WILL,M./
KERNFORSCHUNGSANLAGE JUELICH,GER./
KERNTECHNIK/18/2/FEB 1976/

61-67/
GERMAN AND ENGLISH/
DE/
DE/
KERTA/
EDB-77:006516/

NVIRONMENT AND LIMITATION OF ACCESSIBILITY.THESE KEY FISSI[illegible]DUCTS ARE KR 88,XE 133,TE 129 M,L 131 AND THE METALS SR
),AG 110 M,CS 134 AND CS 137.EXPERIMENTAL RESULTS ARE TABU[illegible].9 REFS./
22.0502/
BENCH-SCALE EXPERIMENTS / CESIUM ISOTOPES /DECONTAMINATION/DEPOSITION/FISSION PRODUCT RELEASE:T,01/FISSION PRODUCTS/
GASEOUS WASTES /: IN : PILE LOOPS / IODINE 131 /KRYPTON 85/NUCLEAR POWER PLANTS:T1/ORGANIZING/RADIOACTIVE EFFLUENTS:01/
RADIOACTIVE WASTES/RESEARCH PROGRAMS/TELLURIUM 129/XENON 133/

13/0/0000001-0000077// 51
77C005350 EDB-77-02 21.050
ERDA-TR--194/
SOME ASPECTS OF WASHING AND TRANSPORTATION OF SPENT FUEL FROM FAST POWER REACTORS/
SMIRIN,V.M./KARPOV,A.V./
1976/
CONF-760576--12/
DEPARTIS 83.5/
TRANSLATION OF A RUSSIAN REPORT/
SU/
US/
ERA-02:009814/EDB-77:005350/
THE PAPER GIVES A BRIEF DESCRIPTION OF THE CONCEPT OF RELOADING OF FAST SODIUM-COOLED REACTORS.SOME ASPECTS OF THE
WASHING AND TRANSPORTATION OF THE SPENT FUEL ARE DISCUSSED. THE POSSIBILITY OF USING LEAD FOR THESE PURPOSES IS
CONSIDERED./
IAEA MEETING ON LMFBR FUEL REPROCESSING/
LENINGRAD,UNION OF SOVIET SOCIALIST REPUBLICS (USSR)/
17 MAY 1976/
OTHER/
P/
21.0500/
CLEANING: 04/DECONTAMINATION/FAST REACTORS:T1/LEAD/POWER REACTORS:T3/REACTOR FUELING/SODIUM/SODIUM COOLED REACTORS:T2/
SPENT FUEL ELEMENTS:T4,01,02,03/TRANSPORT:04/

13/0/0000001-0000077// 52
77X006294 EDB-77-02 21.050
AI-ERDA--13171/
QUARTERLY TECHNICAL PROGRESS REPORT,SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS,JANUARY--MARCH 1975/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
CONTRACT E(04-3)-0824/
28 MAY 1976/
AT/
9 500 331/
US/
US/
ERA-02:009756/EDB-77:006294/
PROGRESS IS SUMMARIZED IN THE FFTF-LMFBR COVER GAS SEALS TEST PROGRAM AND IN SODIUM REMOVAL AND DECONTAMINATION OF
COMPONENTS.(DG)/
OTHER/
P/

13/0/0000001-0000077// 52 CONTINUATION 1 PAGE 23

21.0500/36.0105/
CLINCH RIVER BREEDER REACTOR:T8/CORROSION:06/CORROSIVE EFFECTS/COVER GAS/DECONTAMINATION:04/FFTF REACTOR:T7/LMFBR TYPE
REACTORS: T1/PERFORMANCE TESTING:03/REACTOR COMPONENTS:M4,01/REACTOR COOLING SYSTEMS:M2,01/REMOVAL:05/RESEARCH PROGRAMS/
SEALS:M3,07,08,02/SODIUM:M5/STAINLESS STEEL-304:M6/SURFACE CLEANING/

13/0/0000001-0000077// 53

DE/
V0998/
AIX-07:257807/ERA-02:009723/EDB-77:006244/
STADE NUCLEAR POWER STATION HAS OPERATED VERY SUCCESSFULLY SINCE 1972.WITH A LOAD FACTOR OF 92 PERCENT IT LEADS THE ALL NUCLEAR POWER STATIONS WITH LIGHT-WATER-COOLED REACTORS.THE MOST IMPORTANT CHEMICAL PROBLEM IN THE POWER STATION IS TO PREVENT CORROSION. AFTER A SHORT DESCRIPTION OF THE PLANT AN INDICATION FOLLOWS OF THE CHEMICAL PROBLEMS IN NUCLEAR POWER STATIONS WITH PRESSURISED WATER REACTORS AND OF GUIDELINES FOR AN EFFECTIVE ORGANIZATION./
26 FIGS./5 TABS./16 REFS./
21.0200/
CHEMICAL ANALYSIS /COOLANTS/CORROSION PROTECTION:01/DECONTAMINATION/FEEDWATER/INSPECTION/PURIFICATION/REACTOR COOLING SYSTEMS/REACTOR OPERATION/STADE REACTOR:TI/WATER CHEMISTRY/

13/0/0000001-0000077// 54
77E0002312 EDB-77-01 22.050
AI-ERDA--13168/
STIR FACILITY DECONTAMINATION AND DISPOSITION.FINAL REPORT/
UREDA,B.F./
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
CONTRACT AT(04-3)-701/
26 AUG 1975/
DEP.NTIS $5.0./
9 500 331/
US/
US/
INS-76:022889/ERA-02:007258/EDB-77:002312/
THE DECONTAMINATION AND DISPOSITION (D AND D)OF BUILDING 029,SHIELD TEST IRRADIATION REACTOR (STIR)FACILITIES,ARE COMPLETE. THE CORE TANK, THE ACTIVATED CONCRETE STRUCTURES SURROUNDING THE CORE TANKS,THE THERMAL COLUMN.THE REACTOR SHIELD,THE TEST VAULT CARRIAGE,THE WATER COOLING SYSTEMS,AND THE WATER SHIELD DOOR WERE REMOVED,AND THE FACILITY EXHAUST SYSTEM WAS PARTIALLY DISMANTLED.THE FACILITIES WERE DECONTAMINATED TO LEVELS WHICH WERE AS LOW AS PRACTICABLE,BUT IN ALL CASES TO LEVELS BELOW THE LIMITS DESCRIBED AS ACCEPTABLE FOR FUTURE UNRESTRICTED USE.THE MORE SIGNIFICANT D AND D ACTIVITIES ARE SUMMARIZED, AND SPECIAL TECHNIQUES ARE NOTED.RESULTS OF THE RADIOLOGICAL MONITORING IN SUPPORT OF THE D AND D OPERATIONS AND OF THE FINAL RADIOLOGICAL SURVEY ARE PRESENTED./
OTHER/
P/
22.0600/
DECONTAMINATION:01/RADIATION MONITORING/REACTOR COOLING SYSTEMS/REACTOR DISMANTLING:01/SHIELDS/STIR REACTOR:TI/

13/0/0000001-0000077// 55
77E0002307 EDB-77-01 22.050
LIQUID WASTE DECONTAMINATION IN NUCLEAR POWER PLANTS.STATE AND PROSPECTS/
HERZOG,W.(COMP.)/
MINISTERIUM FUER WIRTSCHAFT,MITTELSTAND UND VERKEHR/DUESSELDORF,F.R.GERMANY/APR 1975/
GERMAN/
DE/
DE/

13/0/0000001-0000077// 55 CONTINUATION 1 PAGE 24

AIX-07:244985/ERA-02:007253/EDB-77:002307/
THE STUDY PRESENTED DEALS WITH THE STATUS OF LIQUID WASTE DECONTAMINATION IN NUCLEAR POWER STATIONS AND NUCLEAR RESEARCH CENTRES AND DESCRIBES THE METHODS OF LIQUID WASTE PROCESSING AND THEIR POSSIBILITIES OF DEVELOPMENT.THE FOLLOWING DECONTAMINATION METHODS ARE EXAMINED AND DISCUSSED REGARDING THEIR APPLICABILITY AND EFFECTIVENESS 1)CHEMICAL PRECIPITATION / 2)ION EXCHANGE/3)EVAPORATION/4)ELECTRODIALYSIS/5)REVERSED OSMOSIS.TWO NEW METHODS SEEM TO BE TECHNICALLY APPLICABLE TODAY,BUT ARE VERY EXPENSIVE:A)BITHERMAL H 20-H 2S EXCHANGE (600 /CBM PROCESSED WASTE WATER)/B)FRACTIONATED

05/78 TABS:798 REFSG/WITH AF-/
02/05.2001/
CODE /DECONTAMINATION/DIALYSIS/DISTILLATION/EFFICIENCY/EVAPORATION/ION EXCHANGE/LIQUID WASTES:T2/NUCLEAR POWER PLANTS:
T1/OSMOSIS/PRECIPITATION/RADIOACTIVE EFFLUENTS/RADIOACTIVE WASTE PROCESSING:T3,Q1,Q2/REACTOR OPERATION/REVIEWS:Q3/

13/0/0000001-0000077// 56
77F0000893 EDB-77-01 21.050
METHOD FOR PREVENTING TRITIUM CONTAMINATION OF THE SECONDARY SALT AND OF STEAM IN A MOLTEN SALT NUCLEAR REACTOR/
LECOCQ,ALFRED/
TO CEA/
PATENT/
FRENCH PATENT 2,249,405/A//
24 OCT 1973/
FRENCH/
FR/
FR/
AIX-07:252575/ERA-02:007079/EDB-77:000893/
DESCRIPTION IS GIVEN OF A METHOD FOR PREVENTING TRITIUM CONTAMINATION OF THE SECONDARY SALT AND OF STEAM IN A MOLTEN SALT NUCLEAR REACTOR. IN THE SECONDARY SALT CIRCUIT IS GENERATED A HYDROGEN PRESSURE SUCH THAT SAID HYDROGEN WILL SATURATE THE SECONDARY SALT AND DIFFUSE FROM THE SECONDARY SALT TOWARDS THE PRIMARY SALT.HYDROGEN PRESSURE IN THE SECONDARY SALT IS ABOUT 1 ATMOSPHERE./
AVAILABLE FROM INSTITUT NATIONAL DE LA PROPRIETE INDUSTRIELLE,PARIS (FRANCE)/
21.0500/
DECONTAMINATION:C2/MOLTEN SALT REACTORS:M1/SECONDARY COOLANT CIRCUITS:Q1,M2/TRITIUM/

13/0/0000001-0000077// 57
77X0000883 EDB-77-01 21.050
HEDL-TME--75-1965/
SODIUM TECHNOLOGY TECHNICAL PROGRESS REPORT,OCTOBER--DECEMBER 1975/
ATWOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
LMFBR/
CONTRACT E(45-1)-2170/
MAR 1976/
AT/
2 906 800/
US/
US/
ERA-02:007068/EDB-77:000883/
PROGRESS IN LMFBR-RELATED SODIUM TECHNOLOGY STUDIES IS REPORTED IN THE AREAS OF RADIOACTIVITY CONTROL TECHNOLOGY, SODIUM SYSTEMS DEVELOPMENT,SODIUM SYSTEMS ENGINEERING,AND SODIUM SYSTEMS ANALYSIS.(DG)/
OTHER/
P/
21.0500/22.0600/
CLEANING:C3/CLINCH RIVER BREEDER REACTOR/CORROSION:Q2/CORROSION PRODUCTS/DECONTAMINATION/FAILED ELEMENT MONITORS:Q1,Q4 / FFTF REACTOR: T5 / FISSION PRODUCTS/LMFBR TYPE REACTORS:T1/MATHEMATICAL MODELS/PERFORMANCE TESTING:Q6/PRIMARY COOLANT CIRCUITS: Q1, M2 / RADIOACTIVITY TRANSPORT: Q2 /REACTOR COMPONENTS:Q1,M3,Q5/REACTOR COOLING SYSTEMS/REMOVAL:Q5/RESEARCH PROGRAMS/SODIUM:M6/

13/0/0000001-0000077// 58 PAGE 25

77P0000920 EDB-77-01 21.020
NUCLEAR POWER PLANT WITH PRESSURIZED-WATER REACTOR/
HEITMANN,H.G./
TO KRAFTWERK UNION AG/
PATENT/
GERMAN(FRG)PATENT 2,153,595/B//

X-07:252359/ERA-02:007002/EDB-77:000820/
PRESSURIZED-WATER REACTOR IS DESCRIBED IN THE PRESENT PATENT IN WHICH AN ELECTRON MAGNETIC FILTER LYING IN THE SHUNT FIELD IS USED TO CLEAN THE COOLANT IN THE PRIMARY CYCLE. THE FILTER CONSISTS OF A CONTAINER FILLED WITH MAGNETIZABLE STEEL SPHERES WHICH IS SURROUNDED BY A DIRECT CURRENT FED COIL./
1 FIG./
21.0200/
CLEANING /COOLANT CLEANUP SYSTEMS:M;01/CORROSION PRODUCTS/ELECTRIC FILTERS/PRIMARY COOLANT CIRCUITS/PWR TYPE REACTORS:M1/VALVES/

13/0/0000001-0000077// 59
76X0096524 EDB-76-43 21.050
HEDL-TME--76-25/
SODIUM TECHNOLOGY TECHNICAL PROGRESS REPORT, JANUARY, FEBRUARY, MARCH 1976/
ATWOOD, J.M./
HANFORD ENGINEERING DEVELOPMENT LAB., RICHLAND, WASH. (USA)/
LMFBR/
CONTRACT E(45-1)-2170/
JUN 1976/
AT/
2 905 800/.
US/
US/
ERA-02:004890/EDB-76:096524/
PROGRESS IN LMFBR-RELATED SODIUM TECHNOLOGY STUDIES IS REPORTED IN THE AREAS OF RADIOACTIVITY CONTROL, SODIUM SYSTEMS DEVELOPMENT, SODIUM SYSTEMS ENGINEERING, SODIUM SYSTEMS ANALYSIS, AND THE HYDRAULICS AND MECHANICS PROGRAM. (DGI)/
P/
21.0500/22.0600/
CLEANING: 03 / CLINCH RIVER BREEDER REACTOR/COLD TRAPS/CORROSION:02/CORROSION PRODUCTS/DECONTAMINATION/FAILED ELEMENT MONITORS: M4, 01 / FFTF REACTOR: T5/FISSION PRODUCTS/LMFBR TYPE REACTORS:T1/MATHEMATICAL MODELS/PERFORMANCE TESTING:04/ PRIMARY COOLANT CIRCUITS: M2, 01 / PROTECTIVE CLOTHING/RADIOACTIVITY TRANSPORT:02/REACTOR COMPONENTS:M3,01,05/REACTOR COOLING SYSTEMS/REMOVAL:05/RESEARCH PROGRAMS/SODIUM:M6/

13/0/0000001-0000077// 60
76U0091087 EDB-76-42 21.040
AECL--5227/
DECONTAMINATION/
MONTFORD, B./
ATOMIC ENERGY OF CANADA LTD., CHALK RIVER, ONTARIO. CHALK RIVER NUCLEAR LABS./ATOMIC ENERGY OF CANADA LTD., PINAWA, MANITOBA. WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT/
CANDU REACTORS/
AUG 1975/
INIS/
MATERIALS RESEARCH IN AECL, SUMMER 1975/
0 643 000/0 653 000/
CA/
CA/
AIX-07:249578/ERA-02:002799/EDB-76:091087/
DEVELOPMENT OF SPECIAL TECHNIQUES HAS PERMITTED THE USE OF MILD DECONTAMINATION PROCESSES FOR THE CANDU TYPE REACTOR

PRIMARY COOLANT CIRCUIT, OVERCOMING MANY OF THE PROBLEMS ASSOCIATED WITH CONVENTIONAL DECONTAMINATION PROCESSES, WHICH USE STRONG, ACIDIC REAGENTS./
NP/
21.0400/
CANDU TYPE REACTORS:T1/CITRIC ACID/DECONTAMINATION:02/EDTA/OXALIC ACID/PRIMARY COOLANT CIRCUITS:01,12/

[illegible]
[illegible] REACTOR AND NUCLEAR FUEL DEVELOPMENT CORP.,TOKYO (JAP[illegible] ITSUBISHI ATOMIC POWER INDUSTRIES,INC.,TOKYO (JAPAN)/
LMFBR/
20 MAR 1976/
JAPANESE/
DEP.NTIS (US SALES ONLY)$4.0./
5 285 200/4 292 400/
JP/
JP/
ERA-02:000728/EDB-76:086411/
THE TRANSPORT BEHAVIOR OF TRACE AMOUNTS OF RADIONUCLIDES SUCH AS T I AND T XCS IN SODIUM HAS BEEN STUDIED UNDER CONDITIONS OF SODIUM-STEAM REACTION AND SODIUM BURNING CAUSED BY EXCESS STEAM.THE TRAPPING OF THESE RADIONUCLIDES TRANSPORTED INTO GAS PHASE IN A GAS BUBBLER OR SCRUBBER,WHICH IS A COMPONENT OF WASTE GAS TREATMENT SYSTEM,IS ALSO DISCUSSED.THE MAIN EXPERIMENTAL RESULTS ARE PRESENTED./
NP/
22.0502/21.0500/
DECONTAMINATION/GASEOUS WASTES/IODINE 131/LMFBR TYPE REACTORS:T1/RADIOACTIVE WASTE PROCESSING:M,Q1/REMOVAL/SODIUM/

13/0/0000001-0000077// 52
76C0035379 EDB-76-41 21.040
AECL--5113/
DECONTAMINATION OF CANDU PRIMARY COOLANT SYSTEM/
PETTIT,P.J./
ATOMIC ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT/
CHALK RIVER NUCLEAR LABS.,ONTARIO/
SEP 1975/
CONF-741190--/
ACTIVITY TRANSPORT IN CANDUS/
TOMLINSON,M.(ED.)/
0 653 000/
CA/
CA/
ERA-02:000616/EDB-76:035379/
DECONTAMINATION OF RADIOACTIVE SYSTEMS IS NECESSARY TO REDUCE PERSONNEL RADIATION EXPOSURES AND ALSO TO REDUCE EXPOSURE DURING SPECIAL WORK.MECHANICAL DECONTAMINATION METHODS ARE SOMETIMES USEFUL,BUT MOST CONTAMINATED SURFACES ARE INACCESSIBLE, SO CHEMICAL DECONTAMINATION OFTEN IS PREFERRED.THE A-P CITROX METHOD WILL REMOVE MOST CONTAMINANTS FROM CANDU SYSTEMS, BUT IS COSTLY AND LONG,DAMAGES COMPONENTS,AND PRODUCES LARGE QUANTITIES OF RADIOACTIVE LIQUID WASTE.THE REDOX CYCLING PROCESS IS FAST AND INEXPENSIVE,PRODUCES ONLY SOLID WASTES,BUT REMOVES SMALL QUANTITIES OF DEPOSIT FROM MONEL ONLY. THE CAN-DECON PROCESS REMOVES DEPOSITS FROM MOST MATERIALS INCLUDING FUEL CLADDING AND HAS MANY OTHER ADVANTAGES./
SYMPOSIUM ON ACTIVITY TRANSPORT IN CANDUS/
PINAWA,MANITOBA,CANADA/
18 NOV 1974/
21.0400/40.0702/
CANDU TYPE REACTORS:T1/DECONTAMINATION:Q2/PRIMARY COOLANT CIRCUITS:T2,Q1/RADIOACTIVITY TRANSPORT/

13/0/0000001-0000077// 63 PAGE 27

76P0079746 EDB-76-40 21.030
METHOD FOR PREVENTING TRITIUM CONTAMINATION OF SECONDARY SALT AND STEAM IN A MOLTEN SALT REACTOR/
LECOCQ,A./
TO COMMISARIAT A L'ENERGIE ATOMIQUE/
PATENT/
US PATENT 3,963,564/

I-76:019559/EBA-02:000609/EDB-76:079764/
HYDROGEN PRESSURE OF THE ORDER OF 1 ATMOSPHERE IS ESTABLISHED IN THE SECONDARY SALT CIRCUIT OF A MOLTEN SALT REACTOR SO AS TO ENSURE THAT THE HYDROGEN SATURATES THE SECONDARY SALT AND DIFFUSES FROM THE SECONDARY SALT TO THE PRIMARY SALT. 2 CLAIMS,1 DRAWING FIGURE./
G21C15/00/
21.0300/
DECONTAMINATION:Q2/MOLTEN SALT REACTORS:M1/RADIATION PROTECTION/REACTOR COOLING SYSTEMS/SECONDARY COOLANT CIRCUITS:M2, Q1/TRITIUM/

13/0/0000001-0000077// 64
76C0074135 EDB-76-39 21.030
DEVELOPMENT OF A METHOD FOR DECONTAMINATING THE PRIMARY CIRCUIT OF A HELIUM-COOLED HIGH-TEMPERATURE REACTOR/
SCHENKER, E. / LOEWENSCHUSS, H. / ULLRICH, G. /WIEDEMANN,K.H.(EIDGENOESSISCHES INST.FUER REAKTORFORSCHUNG,WOERENLINGEN (SWITZERLAND))/
IAEA/VIENNA/1976/
FRENCH/
IAEA-SM--200/4/
GAS-COOLED REACTORS WITH EMPHASIS ON ADVANCED SYSTEMS.PROCEEDINGS OF A SYMPOSIUM JOINTLY ORGANIZED BY THE IAEA AND THE OECD NUCLEAR ENERGY AGENCY AND HELD IN JUELICH,13-17 OCTOBER 1975/
CH/
XA/
AIX-07:246810/EDB-76:074135/
IN A HELIUM-COOLED HIGH-TEMPERATURE (HHT)REACTOR WITH GAS TURBINE THE TURBINE MUST BE ACCESSIBLE FOR MAINTENANCE.IF THE ACTIVITY OF THE PRIMARY CIRCUIT BECOMES EXCESSIVE DUE TO FISSION AND ACTIVATION PRODUCT CONTAMINATION, DECONTAMINATION PROCEDURES MUST BE UNDERTAKEN TO MAKE THE SYSTEM ACCESSIBLE.FOR TWO YEARS SEVERAL GROUPS HAVE BEEN WORKING ON THE DEVELOPMENT OF A DECONTAMINATION PROCESS FOR AN HHT REACTOR AND PROMISING RESULTS HAVE BEEN OBTAINED.A METHOD HAS BEEN DEVELOPED FOR ARTIFICIALLY CONTAMINATING SPECIMENS OUT OF PILE WITH T UCS, T XCS AND AGSUP(M) . THE ADHESION OF CAESIUM TO SPECIMENS CONTAMINATED OUT OF PILE IS COMPARABLE WITH THAT OBSERVED IN SPECIMENS CONTAMINATED IN PILE.IN-PILE EXPERIMENTS HAVE SHOWN THAT THE CONTAMINATION DEPENDS QUALITATIVELY AND QUANTITATIVELY ON THE MATERIAL USED AND ITS SURFACE CONDITION. TREATMENT OF SPECIMENS WITH SOLUTIONS CONTAINING OXIDIZING AGENTS AND SUBSTANCES OF COMPLEX FORMATION HAS LED TO THE DETERMINATION OF MORE THAN 100 DECONTAMINATION FACTORS ASSOCIATED WITH AN ACCEPTABLE MATERIAL CORROSION RATE.IN PARALLEL WITH THESE EXPERIMENTS THE CORROSION OF MATERIALS HAS BEEN INVESTIGATED USING ELECTROCHEMICAL METHODS, IN PARTICULAR CONTACT CORROSION AND CREVICE CORROSION.THE INITIAL RESULTS OF STUDIES OF THE INTERACTIONS BETWEEN HELIUM CONTAMINANTS AND METALLIC MATERIALS ARE ALSO AVAILABLE.THE FIRST PART OF THE PROGRAMME WAS TO DETERMINE THE MECHANICAL CHARACTERISTICS BEFORE AND AFTER DECONTAMINATION,ESPECIALLY UNDER ALTERNATING STRESSES. ALL THESE INVESTIGATIONS WILL BE PURSUED WITH A VIEW TO ESTABLISHING A DECONTAMINATION PROCESS WHICH WILL ENABLE THE GAS TURBINE AND OTHER PARTS OF AN HHT REACTOR TO BE DECONTAMINATED WITHOUT DAMAGE TO THE MATERIALS./
PROCEEDINGS SERIES/
ISBN--92-0-050076-5/
SYMPOSIUM ON GAS-COOLED REACTORS WITH EMPHASIS ON ADVANCED SYSTEMS/
JUELICH,F.R.GERMANY/
13 OCT 1975/
21.0300/
CONTAMINATION/CORROSION RESISTANCE/DECONTAMINATION:Q2/EFFICIENCY/FISSION PRODUCTS/GAS TURBINES/HELIUM COOLED REACTORS/ HTGR TYPE REACTORS:T1/IRON BASE ALLOYS/PRIMARY COOLANT CIRCUITS:T2,Q1/

13/0/0000001-0000077// 65 PAGE 25

76P0069219 EDB-76-38 21.040
PROCESS FOR DECONTAMINATING A HEAVY WATER REACTOR AND ITS ASSEMBLED PIPINGS WITH OXALIC DEUTERIDE/
MOTOJIMA,KENJI/SKURAI,HIROSHI/ONISHI,HIROSHI/SASAKI,YASUICHI/KOIKE,MITSURU/
TO JAPAN ATOMIC ENERGY RESEARCH INST.,TOKYO/
PATENT/
JAPANESE PATENT 1974-29239/B/EAVY WATER REACTOR AND ITS ASSEMBLED PIPINGS WITH OXALIC DEUTERIDE/

RAPID AND SIMPLE PROCESS FOR DECONTAMINATING A HEAVY ER REACTOR AND ITS ASSEMBLIES WITH OXALIC DEUTERIDE IS EN,COMPRISING THREE STEPS:(1)ELUTING WITH OXALIC DEUTERIDE THE NUCLEAR FUELS,SUCH AS TH,U AND PU FISSION PRODUCTS AND OTHER DERIVED RADIOACTIVE NUCLIDES COHERED TO THE BODY AND ASSEMBLIES OF A HEAVY WATER MODERATED AND COOLED REACTOR,(2) DECOMPOSING THE SPENT OXALIC ACID FOR THE ELUTION WITH RADIATION AND SOLIDIFYING THE DISSOLVED REACTOR MATERIALS,NUCLEAR FUELS AND RADIOACTIVE MATERIALS,AND (3)REMOVING THE SOLIDS AND IONS OF HEAVY WATER TOGETHER WITH FILTRATION ALONE OR IN COMBINATION WITH ION EXCHANGE.IN THIS CASE,THE COHERED NUCLEAR FUEL OF RADIOATIVE NUCLIDES PRODUCE SOLUBLE COMPLEX SALTS WITH OXALIC ACID.THE ELUTED SUBSTANCES BECOME INSOLUBLE WHEN OXALIC ACID DECOMPOSES.THE OXALIC DEUTERIDE MAY BE OBTAINED BY DISSOLVING AND VACUUM-DISTILLATING OXALIC ANHYDRIDE.IN EMBODIMENTS,A HEAVY WATER SOLUTION OF OXALIC DEUTERIDE HAVING A CONCENTRATION OF 0.014 AT 10 - 50 C WAS CONTACTED WITH THE SURFACES TO BE TREATED.NUCLEAR FUEL (U)AND RADIOACTIVE MATERIALS WERE ELUTED FROM THE SURFACE OF REACTOR MATERIALS WITHIN 10 HOURS WITH A CONSTANT CONCENTRATION.THE OBTAINED SOLUTION WAS IRRADIATED WITH 3 X 10 X R OF GAMMARADIATION TO DECOMPOSE OXALIC ACID AND TO DEPOSIT A MAJOR PORTION OF THE DISSOLVED REACTOR MATERIALS,FUEL MATERIALS AND RADIOACTIVE MATERIALS.THE CRYSTALLINE PARTICLE DEPOSIT WAS FILTERED./

INT.CL.G21F9/00/F05B3/06/

NP/

21.0400/40.0702/

DECOMPOSITION / DECONTAMINATION: T,01;02/DEUTERIUM COMPOUNDS/ELUTRIATION/FILTRATION/GAMMA RADIATION/HEAVY WATER COOLED REACTORS: T1 / HEAVY WATER MODERATED REACTORS: T2 / ION EXCHANGE/IRRADIATION/OXALIC ACID/PIPES/RADIOACTIVE MATERIALS/ RADIOLYSIS/SURFACE CLEANING/

13/0/0000001-0000077// 66

76C0064398 EDB-76-37 22.070

UNI-SA--26/

UNITED NUCLEAR INDUSTRIES,INC.PRACTICAL APPLICATION OF ALARA (ALAP)PHILOSOPHY/

HALL,T.M./

UNITED NUCLEAR INDUSTRIES,INC.,RICHLAND,WASH.(USA)/

CONTRACT AT(45-1)-1857/

28 APR 1976/

CONF-761101--1/

DEP.NTIS $4.00./

9 500 320/

US/

US/

INS-76:017413/ERA-01:023356/EDB-76:064398/

THE N REACTOR IS THE ONLY DUAL-PURPOSE REACTOR IN THE USA.IT IS OWNED BY ERDA AND IS CURRENTLY OPERATED BY UNITED NUCLEAR INDUSTRIES, INC. THE PLANT BEGAN OPERATION IN 1964.MONITORING OF THE PRIMARY COOLANT PIPING RADIATION LEVELS INDICATED A BUILD-UP THAT WAS NOT LINEAR WITH TIME.IT WAS FORMING AT AN ACCELERATING RATE,AND IT WAS APPARENT THAT RADIATION EXPOSURE WAS GOING TO BE A SIGNIFICANT FACTOR IN N PLANT OPERATION.BY 1967,CONNECTOR PIPING RADIATION LEVEL WAS 1 REM / HR.A RADIATION EXPOSURE REDUCTION TASK FORCE WAS CHARTERED IN 1967 TO DEVELOP AND CARRY OUT AN EXPOSURE REDUCTION PLAN. A DECONTAMINATION TASK FORCE WAS ALSO CHARTERED TO DETERMINE HOW TO CHEMICALLY CLEAN OUT THE PRIMARY PIPING TO REDUCE RADIATION LEVELS.IN OCTOBER 1967,THE FIRST REACTOR PIPING DECONTAMINATION WAS PERFORMED,AND CONNECTOR RADIATION LEVELS WERE REDUCED FROM 1 REM / HR TO 20 MREM/HR.THE TASK FORCES ALSO ATTACKED OTHER RADIATION EXPOSURE PROBLEMS WITH SUCCESS. IN 1974,AN EXPOSURE REDUCTION PROGRAM MANAGER POSITION WAS CREATED TO CARRY ON THE WORK OF THE TASK FORCE EFFORTS. OUT OF THIS CAME THE CURRENT EFFORT FOR ALARA.BY NECESSITY,N PLANT OPERATION HAS BEEN APPLYING THE PRINCIPLES OF ALARA (ALAP)SINCE 1967.THE METHODS HAVE IMPROVED WITH TIME,NEW TECHNIQUES HAVE BEEN PUT TO USE,AND OTHERS DISCARDED. THE PURPOSE OF THIS PAPER IS TO DESCRIBE HOW UNI HAS MADE PRACTICAL THE APPLICATION OF THE ALARA (ALAP) PRINCIPLES./

THE REMOTE SYSTEMS TECHNOLOGY DIVISION OF THE AMERICAN NUCLEAR SOCIETY WINTER MEETING/

WASHINGTON,DISTRICT OF COLUMBIA,UNITED STATES OF AMERICA (USA)/

NOV 1976/

P/

22.0700/

DECONTAMINATION/N-REACTOR:T1/PRIMARY COOLANT CIRCUITS:01/RADIATION DOSES/RADIATION PROTECTION/RADIOACTIVE EFFLUENTS/

PHYSICO-CHEMICAL ASPECTS OF RADIONUCLIDE REMOVAL UNDER DENT CONDITIONS IN NUCLEAR POWER PLANTS BY MEANS OF AINMENT-BUILDING SPRAY SYSTEMS.A LITERATURE SURVEY/
ALM,M./
STAATLICHES AMT FUER ATOMSICHERHEIT UND STRAHLENSCHUTZ,BERLIN (GERMAN DEMOCRATIC REPUBLIC)/
PWR/
JAN 1976/
GER44N/
NTIS (US SALES ONLY)/
5 905 020/
DD/
DD/
AIX-07:240882/ERA-01:019372/EDB-76:059365/
A SURVEY IS GIVEN ON INDUSTRIAL SPRAY SOLUTIONS,THEIR THERMAL AND RADIATION STABILITY,DROP EFFECTS,AND THE CORROSION BEHAVIOUR OF REACTOR AND CONTAINMENT MATERIALS.FROM THE HITHERTO KNOWN SPRAY EXPERIMENTS IT MAY BE CONCLUDED THAT (1) SPRAY SOLUTIONS CAN BE USED FOR THE EFFECTIVE DECONTAMINATION OF THE CONTAINMENT ATMOSPHERE IN THE EVENT OF A LOSS-OF-COOLANT ACCIDENT, (2) THE SPRAY EFFICIENCY FOR THE REMOVAL OF GASEOUS AND VOLATILE FISSION PRODUCTS CAN BE ASSESSED BY MEANS OF SIMPLIFIED MODEL CONSIDERATIONS,(3)FURTHER WORK IS NECESSARY TO OPTIMIZE THE TECHNOLOGY OF THE SPRAY PROCESS./
NP/
22.0900/21.0200/
BORIC ACID / CONTAINMENT / CONTAINMENT SPRAY SYSTEMS:M2,01/CORROSION/DECONTAMINATION/EFFICIENCY:02/FISSION PRODUCTS/ HYDRIODIC ACID/IODINE ISOTOPES/LOSS OF COOLANT/METHYL IODIDE/PWR TYPE REACTORS:TI/REVIEWS/SPRAYS/THIOSULFATES/

13/0/0000001-0000077// 68
76P0058172 EDB-76-36 21.050
METHOD OF REMOVING BULK SODIUM FROM METALLIC SURFACES/
MAFFEI,H.P./BORISCH,R.R./
TO U.S.ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION/
PATENT/
US PATENT 3,918,961/
FILED DATE 12 DEC 1974/
11 NOV 1975/
US/
US/
NSA-33:28060/ERA-01:010553/EDB-76:058172/
A PROCESS OF REMOVING SODIUM FROM AN ARTICLE,PARTICULARLY ONE MADE OF STAINLESS STEEL,BY TREATING IT WITH A MIXTURE OF WATER VAPOR AND A GAS WHICH IS INERT TO SODIUM IS DESCRIBED.BY SELECTING COMBINATIONS OF TEMPERATURE AND WATER VAPOR-TO-GAS RATIO,THE REACTION TEMPERATURE IS CONTROLLED TO PREVENT DAMAGE TO THE ARTICLES./
C22327/00/
PAT-APPL-532,138/
P/
21.0500/
CLEANING:G2/REACTOR COMPONENTS:M2,01/SODIUM/SODIUM COOLED REACTORS:M1/STAINLESS STEELS/TEMPERATURE CONTROL/WATER VAPOR

13/0/0000001-0000077// 59
76J0058168 EDB-76-36 21.050
TEST RUN OF 50 MW STEAM GENERATOR FOR PROTOTYPE FAST BREEDER REACTOR OF PNC/
TANAKA,K.(POWER REACTOR AND NUCLEAR FUEL DEVELOPMENT CORP.,OARAI,IBARAKI (JAPAN).OARAI ENGINEERING CENTER)/

GENSHIRYOKU KOGYO/20/11/NOV 1974/
45-50/
JAPANESE/
JP/
JP/
GKOGA/

PLANT HAVE BEEN DEVELOPED, WHICH LEAD TO THE DEMONSTRATION OF THE STEAM GENERATOR AND THE ESTABLISHMENT OF PLANT TOOL TECHNOLOGY FOR THE FAST BREEDER REACTOR. THE STEAM GENERATOR IS SEPARATE HELICAL-COIL TYPE WITH AN EVAPORATOR, A SUPERHEATER AND A REHEATER. TAKING TWO TO THREE YEARS IN CONSTRUCTION. IN JUNE 1974, THE STEAM GENERATOR WITH THE TESTING FACILITY WAS SUCCESSFULLY OPERATED AT RATED POWER OF 50 MW CONTINUOUSLY FOR 72 HOURS. THE STEAM GENERATOR PLANNED FOR THE PROTOTYPE FOR "MONJU" IS FIRST OUTLINED; TOGETHER WITH ITS DEVELOPMENT PROGRAM. THE 50 MW STEAM GENERATOR AND THE TESTING FACILITY ARE THEN DESCRIBED, INCLUDING CONSTRUCTION AND OPERATION/FINALLY, THE RESULTS OF TEST AND FUTURE TEST PLANS ARE EXPLAINED./

21.0500/

CLEANING /CONSTRUCTION/COOLANT LOOPS/FLOW RATE/HEAT TRANSFER/LEVELS/LIQUID METALS/MECHANICAL STRUCTURES/MONJU REACTOR:T1/PERFORMANCE TESTING/PLANNING/SAFETY/SODIUM/STEAM/STEAM GENERATORS:T2,01/TEMPERATURE CONTROL/TEST FACILITIES:02/

13/0/0000001-0000077// 70

76R0057820 EDB-76-36 05:080

MF--27563/

PRECIPITATION OF PLUTONIUM(IV)OXALATE IN TASK 7/

HARMON,K.M./

HANFORD WORKS,RICHLAND,WASH.(USA)/

APR 1953/

DEP.NTIS $3.50./

2 910 000/

US/

US/

ERA-01:01E705/EDB-76:057820/

LABORATORY EXPERIENCE ON THE PRECIPITATION OF PU(IV)OXALATE IS SUMMARIZED. FILTERABLE PU(IV)OXALATE WITH A CAKE DENSITY OF 0.5 TO 0.7 G PU/CM**3 CAKE WAS PRECIPITATED FROM REDOX PR SOLUTIONS CONTAINING 10 TO 200 G/L PU AND 2 TO 5 N HNO3. FILTRATION EASE INCREASED WITH STRIKE TEMPERATURE FROM 35 TO 60 DEG C. OPTIMUM CONDITIONS FOR PRE-REDUCTION OF PU(VI) TO (IV), PRECIPITATION, DIGESTION, FILTRATION AND WASHING WERE DETERMINED FOR 50 G/L PU. SEPARATION FACTORS OF 80, 40, 23, AND 12 FOR AL, CR, FE, AND U AND DECONTAMINATION FACTORS OF 1.2, 12, AND 3 FOR AM, RU, AND ZR--NB WERE OBTAINED./

DECLASSIFIED 20 APR 1976/

P/

05.0800/21.0802/

ALUMINIUM/AQUEOUS SOLUTIONS/CHROMIUM/DECONTAMINATION/EFFICIENCY/FILTRATION/FISSION PRODUCTS/IRON/NITRIC ACID/OXALATES/OXALIC ACID / PLUTONIUM: T2/PLUTONIUM COMPOUNDS/PRECIPITATION/REDOX PROCESS:01/SEPARATION PROCESSES:02/SPENT FUELS:T1/URANIUM/

13/0/0000001-0000077// 71

76R0052393 EDB-76-35 21.050

AI-ERDA--13165/

SODIUM TECHNOLOGY AND COVER-GAS-SEAL DEVELOPMENT PROGRAMS-QUARTERLY TECHNICAL PROGRESS REPORT,OCTOBER--DECEMBER 1975/

ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/

LMFBR/

CONTRACT AT(04-3)-824/

15 FEB 1976/

AT/

9 500 331/

US/

US/

ERA-01:019130/EDB-76:052393/

PROGRESS IS SUMMARIZED IN THE AREAS OF LMFBR COMPONENT DECONTAMINATION AND SODIUM REMOVAL AND FFTF AND LMFBR SEALS DEVELOPMENT AND TESTING./

13/0/0000001-0000077// 72 CONTINUATION 1 PAGE 31

P/

21.0500/

BEARINGS:M5/CLEANING:03/CLINCH RIVER BREEDER REACTOR:T8/COATINGS:04/CORROSIVE EFFECTS:07/COVER GAS/DATA/FRICTION:04,05 / LMFBR TYPE REACTORS:T1/PERFORMANCE TESTING:06/PHYSICAL PROPERTIES/REACTOR COMPONENTS:M3,08/REACTOR COOLING SYSTEMS:M2, 01 / REACTOR MATERIALS:M4/REMOTE HANDLING EQUIPMENT/REMOVAL:07/RESEARCH PROGRAMS/SEALS:M6,02/SODIUM:M7/STAINLESS STEELS/STORAGE:03/TRAPS/

REDDICK,G.W./
GENERAL ATOMIC CO.,SAN DIEGO,CALIF.(USA)/
CONTRACT E(04-3)-167/
FEB 1976/
DEP.NTIS $4.50./
9 500 489/
US/
US/
INS-76:014207/ERA-01:018705/EDB-76:051846/
ACID-THOREX FLOWSHEETS USING TRIBUTYL PHOSPHATE (TBP)TO PROCESS FEED WHICH SIMULATED THAT FROM HTGR FUELS WERE TESTED IN PULSED SOLVENT EXTRACTION COLUMNS.TESTS WERE PERFORMED TO STUDY THE EFFECTS OF SOLVENT DEGRADATION AND SOLIDS IN THE FEED AND DECONTAMINATION PERFORMANCE USING TRACER ZR-95.EQUIPMENT RECOMMENDATIONS FOR EACH PROCESS STEP ARE MADE.THE ACID-THOREX PROCESS IS EXPECTED TO PROVIDE RELATIVELY TROUBLE-FREE OPERATION IN COMMERCIAL REPROCESSING OF HTGR FUEL. (AUTH)/
P/
05.0800/40.0105/21.0802/
DECOMPOSITION /DECONTAMINATION/EFFICIENCY/FLOWSHEETS/HTGR TYPE REACTORS/RESEARCH PROGRAMS:02/SOLVENT EXTRACTION:03,04/ SPENT FUELS:T1/TBP/THOREX PROCESS:01,T2/THORIUM:T4/URANIUM:T3/

13/0/0000001-0000077// 73
76R0041302 EDB-76-33 22.060
AI-ERDA--13159/
KEWB FACILITIES DECONTAMINATION AND DISPOSITION.FINAL REPORT/
UREDA,B.F./
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
CONTRACT AT(04-3)-701/
25 FEB 1976/
DEP.NTIS $5.45./
9 500 331/
US/
US/
ERA-01:013201/INS-76:013107/EDB-76:041302/
THE DECONTAMINATION AND DISPOSITION OF THE KEWB FACILITIES,BUILDINGS 073,643,123,AND 793,ARE COMPLETE.ALL OF THE FACILITY EQUIPMENT,INCLUDING REACTOR ENCLOSURE,REACTOR VESSEL,FUEL HANDLING SYSTEMS,CONTROLS,RADIOACTIVE WASTE SYSTEMS, EXHAUST SYSTEMS, ELECTRICAL SERVICES, AND PROTECTIVE SYSTEMS WERE REMOVED FROM THE SITE.BUILDINGS 643,123,AND 793 WERE COMPLETELY REMOVED,INCLUDING FOUNDATIONS.THE FLOOR AND PORTIONS OF THE WALLS OF BUILDING 073 WERE COVERED OVER BY FINAL GRADING.RESULTS OF THE RADIOLOGICAL MONITORING AND THE FINAL SURVEY ARE PRESENTED.9 TABLES,19 FIGURES.(AUTH)/
P/
22.0600/22.0900/
DECONTAMINATION:01/KEWB REACTOR:T1/RADIATION MONITORING/REACTOR DISMANTLING:T,01/

13/0/0000001-0000077// 74
76X0040517 EDB-76-33 21.050
HEDL-TME--75-117/
SODIUM TECHNOLOGY TECHNICAL PROGRESS REPORT,JULY,AUGUST,SEPTEMBER 1975/
ATWOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/

13/0/0000001-0000077// 74 CONTINUATION 1 PAGE 32
LMPSR/
CONTRACT E(45-1)-2170/
FEB 1976/
DEP.NTIS $6.00./
2 906 800/
US/

21.0500/22.0600/
CLEANING:03/CORROSION:03/CORROSION PRODUCTS/CORROSIVE EFFECTS:04/COVER GAS/DECONTAMINATION/FAILED ELEMENT DETECTION:M,
01,02/FFTF REACTOR:T2/FISSION PRODUCTS/LMFBR TYPE REACTORS:T1/REACTOR COMPONENTS:M3,01,02/REMOVAL:04/SODIUM:M4/

13/0/0000001-0000077// 75
76:040466 EDB-76-33 21.020
WCAP--8215/
STEAM SIDE IODINE TRANSPORT STUDY AT POINT BEACH UNIT NO.1 OF WISCONSIN ELECTRIC POWER COMPANY/
HOOD,G.W./
WESTINGHOUSE NUCLEAR ENERGY SYSTEMS,PITTSBURGH,PA.(USA)/
OCT 1973/
WESTINGHOUSE ELECTRIC CORP.,PITTSBURGH,PA./
9 500 251/
US/
US/
ERA-01:012954/INS-76:013029/EDB-76:040466/
AN OPERATING PLANT STUDY WAS CONDUCTED AT POINT BEACH UNIT 1 OF THE WISCONSIN ELECTRIC POWER COMPANY'S NUCLEAR POWER STATION FOR THE PURPOSE OF EVALUATING RADIOIODINE TRANSPORT MECHANISM AND TO MEASURE THE ENVIRONMENTAL RADIOISOTOPE RELEASE RATES FROM THE SECONDARY PLANT.DECONTAMINATION FACTORS FOR THE STEAM GENERATOR,THE REHEATER MOISTURE SEPARATOR, THE MAIN CONDENSER AIR EJECTOR AND THE GLAND SEAL STEAM CONDENSER VENT WERE DETERMINED.AN ATTEMPT WAS MADE TO CHARACTERIZE THE CHEMICAL NATURE OF THE SPECIES OF IODINE FOUND IN THE MAIN STEAM,THE AIR EJECTOR VENT GAS AND THE GLAND SEAL STEAM CONDENSER VENT.IN ADDITION TO THE SECONDARY PLANT MEASUREMENTS,MEASUREMENTS WERE MADE TO DETERMINE A DECONTAMINATION FACTOR FOR THE CHEMICAL AND VOLUME CONTROL TANK./
NP/
21.0200/
DECONTAMINATION/DIFFUSION/FISSION PRODUCT RELEASE:01/IODINE/POINT BEACH-1 REACTOR:T1/SECONDARY COOLANT CIRCUITS/

13/0/0000001-0000077// 76
76X034168 EDB-76-32 21.050
AI-ERDA--13154/
SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS.ANNUAL TECHNICAL PROGRESS REPORT,GOVERNMENT FISCAL YEAR 1975
/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
CONTRACT AT(04-3)-824/
15 AUG 1975/
AT/
9 500 3317
US/
US/
NSA-33:32273/ERA-01:012993/EDB-76:034168/
PROGRESS IS REPORTED IN THE AREAS OF SODIUM REMOVAL-STORAGE, ALCOHOL-SODIUM REMOVAL PROCESS DEVELOPMENT,CRBRP ALCOHOL-SODIUM REMOVAL PROCESS SUPPORT,HOT GAS LANCE STUDY,EVAPORATIVE REMOVAL OF SODIUM,SODIUM-WATER REACTION PRODUCTS REMOVAL, FRICTION TESTS OF FFTF COMPONENTS,GENERAL SEAL DEVELOPMENT,FFTF AND CRBRP INFLATABLE SEALS,FOR SHIELD PIP SEAL CONFIGURATION CHARACTERIZATION,ADVANCED SEAL GEOMETRIES AND MATERIALS,AND SODIUM VAPOR TESTS.(JAR)/
P/
21.0500/21.0600/

13/0/0000001-0000077// 76 CONTINUATION 1 PAGE 33
BEARINGS: M6 / CLEANING: 07 / CLINCH RIVER BREEDER REACTOR:T2/COATINGS/CORROSIVE EFFECTS:05/COVER GAS/FFTF REACTOR:T3/
FRICTION: 06 / LMFBR TYPE REACTORS: T1 /PERFORMANCE TESTING:05/PHYSICAL PROPERTIES/REACTOR COMPONENTS:M7,02,03/REACTOR
COOLING SYSTEMS:M4,01/REACTOR MATERIALS:M/REMOTE HANDLING EQUIPMENT/REMOVAL:08/RESEARCH PROGRAMS/SEALS:M5,04/SODIUM:M3/
STAINLESS STEELS/

13/0/0000001-0000077// 77

74/
INIS/
D 807 000/
IN/
IN/
EDB-76:034139/
A BRIEF SUMMARY OF THE DIFFERENT DECONTAMINATION TECHNIQUES AND PROCEDURES EMPLOYED FOR VARIOUS TYPES OF ACTIVE SURFACES PRESENT IN COMPONENTS AND SYSTEMS OF WATER COOLED NUCLEAR REACTORS IS PRESENTED.THE VARIOUS EXPERIMENTAL RESULTS OBTAINED IN AN EFFORT TO DEVELOP DECONTAMINANTS ARE PRESENTED.IT WAS FOUND THAT A MIXTURE OF EDTA/HYDRAZINE WAS EFFECTIVE FOR REMOVING DEPOSITS ON CS SURFACES,WHEREAS EDTA/H 2O 2 AND OXALIC ACID/H 2O 2 MIXTURES WERE EFFECTIVE ON SS SURFACES.THE EXPERIENCE GAINED DURING THE CHEMICAL CLEANING OF A TEST SECTION IN THE CLEAN-UP DEMINERALIZER SYSTEM OF BOTH UNITS I AND II OF TAPS IS REVIEWED.THE OXALIC ACID-PEROXIDE MIXTURE REMOVED 80 PERCENT OF THE ESTIMATED W CO ACTIVITY FROM THE SYSTEM SURFACE.(AUTH)/
43 REFS.ON PAGES 32-34/
NP/
21.0100/
COBALT 60 / DECONTAMINATION: Q1, Q2 /EDTA/HYDROGEN PEROXIDE/MIXTURES/OXALIC ACID/REACTOR COMPONENTS/STAINLESS STEELS/ SURFACE CONTAMINATION/TARAPUR-1 REACTOR:T1/TARAPUR-2 REACTOR:T2/WATER COOLED REACTORS/

ERDA RADCON

TERMINAL 327
SESSION 0004. FILE NSA

DAVE SCHNEIDMILLER
REACTOR DECONTAMINATION
ERDA RECON NSA
8/10/77

1	NC=77.000	21518
2	NC=78.000	9237
3	NC=79.000	10335
4	IT=DECONTAMINATION	1649
5	IT=CLEANING	675
6	IT=CORROSION PRODUCTS	112
7	IT=SURFACE CLEANING	137
8	4-7/+	2443
9	1*8	265
10	2*8	45
11	3*8	82
12	9-11/+	368
99	KEEP = DATA SET	38

MOST RECENT 100 OF 368 TITLES LISTED

032529 NSA-33-12 79.200
METHOD FOR THE DECONTAMINATION OF THE COOLANT N/SUB 2/O/SUB 4/ FROM RADIOIODINE/
DRUGACHENOK,M.A./SOLMISEV,V.P./DATSKEVICH,P.I./KUZNETSOVA,V.B./DOLGOV,V.M./
INST.OF NUCLEAR ENERGY,MINSK/
PURIFICATION OF PRIMARY COOLANT/
VESTSI AKAD.NAVUK BSSR,SER.FIZ.-ENERG.NAVUK/4/1975/37-39/(IN RUSSIAN)
BY/
BY/
(VAFEA)
40.430/
ADSORPTION:01 / COOLANTS:02/DECONTAMINATION:03/DISSOCIATING GASES/GAS COOLED REACTORS:M2/GASES/IODINE 131:M1/NITROGEN OXIDES:M3/SILICA GEL/SILVER NITRATES/

12/2/0000001-0000100// 2
33B0032522 NSA-33-12 79.200
ACCUMULATION OF RADIOACTIVE CORROSION PRODUCTS IN NUCLEAR STEAM GENERATORS/
LISTER,D.H./
ATOMIC ENERGY OF CANADA LTD./CHALK RIVER,ONT./1976/$1.50/
CA/
CA/
CORROSION PRODUCTS:M3,02/DATA/MATHEMATICAL MODELS:03/NUCLEAR POWER PLANTS:M1/STEAM GENERATORS:M2,01/

12/2/0000001-0000100// 3
33X0032273 NSA-33-12 77.500
EAI-ERDA--131547 SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS.ANNUAL TECHNICAL PROGRESS REPORT,GOVERNMENT FISCAL YEAR 1975/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
15 AUG 1975/AT/
IC=9 500 331/
US/
US/
77.800/
BEARINGS: M6 / CLEANING: 07 / CLINCH RIVER BREEDER REACTOR:M2/COATINGS/CORROSIVE EFFECTS:08/COVER GAS/FFTF REACTOR:M3/ FRICTION: 06 / LMFBR TYPE REACTORS: M1 /PERFORMANCE TESTING:05/PHYSICAL PROPERTIES/REACTOR COMPONENTS:M7,02,03/REACTOR COOLING SYSTEMS:M4,01/REACTOR MATERIALS:M/REMOTE HANDLING EQUIPMENT/REMOVAL:08/RESEARCH PROGRAMS/SEALS:M5,04/SODIUM:M9/ STAINLESS STEELS/

12/2/0000001-0000100// 4
33Y0032234 NSA-33-12 77.200
INSPECTION AND REPAIRS OF REACTOR COMPONENTS/
SNTL - NAKLADATELSTVI TECHNICKE LITERATURY/PRAGUE/1974/(IN CZECH)
OPERATION OF NOVO VORONEZH NUCLEAR POWER PLANT REACTORS/
CS/
CS/
DECONTAMINATION / INSPECTION /PRIMARY COOLANT CIRCUITS/REACTOR MAINTENANCE:01,02,03,04/REPAIR/WATER/WWER-1 REACTOR:M1/ WWER-2 REACTOR:M2/WWER-3 REACTOR:M3/WWER-4 REACTOR:M4/

12/2/0000001-0000100// 5
33Y0032231 NSA-33-12 77.200
NUCLEAR POWER PLANT FLOW CHARTS/
SNTL - NAKLADATELSTVI TECHNICKE LITERATURY/PRAGUE/1974/(IN CZECH)
OPERATION OF NOVO VORONEZH NUCLEAR POWER PLANT REACTORS/
CS/
CS/
DECONTAMINATION / FILTERS / FILTRATION /FLOWSHEETS/GASEOUS WASTES/ION EXCHANGE MATERIALS/LIQUID WASTES/PRIMARY COOLANT CIRCUITS /PURIFICATION/RADIOACTIVE WASTES/REACTOR COOLING SYSTEMS:01,02,03,04/SECONDARY COOLANT CIRCUITS/SPECIFICATIONS/ VENTILATION/WATER/WWER-1 REACTOR:M1/WWER-2 REACTOR:M2/WWER-3 REACTOR:M3/WWER-4 REACTOR:M4/

032220 NSA-33-12 77.200
ECIAL EQUIPMENT OF WATER PURIFYING CIRCUITS/
SNTL - NAKLADATELSTVI TECHNICKE LITERATURY/PRAGUE/1974/(IN CZECH)
OPERATION OF NOVO VORONEZH NUCLEAR POWER PLANT REACTORS/
CS/
CS/
DECONTAMINATION/DISTILLATION/EVAPORATION/EVAPORATORS/FEEDWATER/FILTERS/FILTRATION/ION EXCHANGE MATERIALS/NUCLEAR POWER PLANTS/PRIMARY COOLANT CIRCUITS/PURIFICATION/SPECIFICATIONS/WATER CHEMISTRY:Q1/WWER TYPE REACTORS:M1/

12/2/0000001-0000100// 7
33C0032208 NSA-33-12 77.200
(CEA-CONF--3141)SOLUBILIZATION OF DEPOSITS IN REACTOR CIRCUITS/
BESLU,P./FREJAVILLE,G./LALET,A./MICAUX,B./
CEA CENTRE D'ETUDES NUCLEAIRES DE SACLAY, 91 - GIF-SUR-YVETTE (FRANCE) . DEPT. DE PHYSIQUE DES REACTEURS ET DE MATHEMATIQUES APPLIQUEES/
PWR/
JUN 1975/(IN FRENCH)INIS/
IC=1 404 400/
FR/
FR/
SEMINAR ON DECONTAMINATION OF NUCLEAR PLANTS/
COLUMBUS,USA/
7 MAY 1975/
CORROSION PRODUCTS/DECONTAMINATION/DEPOSITS:Q1/DISSOLUTION/P CODES/PRIMARY COOLANT CIRCUITS:M1,Q2/PWR TYPE REACTORS:M2
/

12/2/0000001-0000100// 8
33J0032200 NSA-33-12 77.100
TRANSPORT OF RADIOACTIVE CORROSION PRODUCTS IN HIGH-TEMPERATURE WATER.II.THE ACTIVATION OF ISOTHERMAL STEEL SURFACES/
LISTER,D.H./
CHALK RIVER NUCLEAR LABS.,ONT./
NUCL.SCI.ENG./59/4/APR 1975/406-426/
CA/
US/
(NSENA)
77.200/
BWR TYPE REACTORS:M1/CHEMICAL REACTION KINETICS/COBALT 60/COMPARATIVE EVALUATIONS/CORROSION/CORROSION PRODUCTS:M4,Q3/DATA /DIFFUSION:Q4/DISTRIBUTION/MATHEMATICAL MODELS/PWR TYPE REACTORS:M2/REACTOR COOLING SYSTEMS:M3,Q1,Q2/SURFACES/WATER COOLED REACTORS/

12/2/0000001-0000100// 9
33P0028060 NSA-33-11 77.500
METHOD OF REMOVING BULK SODIUM FROM METALLIC SURFACES/
MAFFEI,H.P./BORISCH,R.R./
TO U.S.ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION/
PATENT/
US PATENT 3,918,961/
FILED DATE 12 DEC 1974/
11 NOV 1975/
US/
US/
CLEANING:Q2/REACTOR COMPONENTS:M2,Q1/SODIUM/SODIUM COOLED REACTORS:M1/STAINLESS STEELS/TEMPERATURE CONTROL/WATER VAPOR
/

12/2/0000001-0000100// 10
33C0028025 NSA-33-11 77.500
(IAEA--169(VOL.3))PHYSICAL PECULIARITIES OF THE FAST POWER REACTOR FUEL CYCLE/
ORLOV,V.V./BAKUMENKO,O.D./IKHLOV,E.M./KULAKOVSKIJ,M.YA./TROYANOV,M.F./TSYKUNOV,A.G./

INTERNATIONAL ATOMIC ENERGY AGENCY,VIENNA (AUSTRIA)/
1974/INIS/
FISSION PRODUCT NUCLEAR DATA (FPND):PROCEEDINGS OF A PANEL ORGANIZED BY THE IAEA AND HELD IN BOLOGNA,26-30 NOVEMBER
1973/
IC=3 294 000/
AT/
YA/
PANEL ON FISSION PRODUCT NUCLEAR DATA/
BOLOGNA,ITALY/
26 NOV 1973/
DECONTAMINATION / FAST REACTORS/FISSION PRODUCTS/FUEL CYCLE:01/ISOTOPE RATIO:02/LMFBR TYPE REACTORS:M1/NUCLEAR FUELS/
POWER REACTORS/RADIOACTIVITY/SPENT FUEL ELEMENTS:M2,01/TRANSPORT/

12/2/0000001-0000100// 11
33R0025024 NSA-33-11 77.500
(HEDL-TC--327)WATER VAPOR NITROGEN PROCESS FOR SODIUM REMOVAL/
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
AUG 1975/AT/
IC=2 906 800/
US/
US/
CLEANING:02/LMFBR TYPE REACTORS:M1/NITROGEN/REACTOR COMPONENTS:M2,01/REMOVAL:03/SODIUM:M3/STRESS CORROSION/WATER VAPOR .
/

12/2/0000001-0000100// 12
33C0025270 NSA-33-10 77.900
DECONTAMINATION OF DRESDEN UNIT 1/
KIEDAISCH,W.I./
COMMONWEALTH EDISON CO.,CHICAGO/
PROC.AM.POWER CONF./37/1975/267-270/
US/
US/
(PAPWA)
ANNUAL AMERICAN POWER CONFERENCE/
CHICAGO,ILLINOIS,USA/
21 APR 1975/
77.100/
DECONTAMINATION: 01/DEPOSITS/DRESDEN-1 REACTOR:M1/RADIATION DOSES/RADIATION PROTECTION/REACTOR COOLING SYSTEMS/SURFACE
CLEANING/SURFACES/

12/2/0000001-0000100// 13
33X0025179 NSA-33-10 77.500
(HEDL-TME--75-84)SODIUM TECHNOLOGY TECHNICAL PROGRESS REPORT,APRIL,MAY,JUNE 1975/
ATWOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
LMFBR/
DEC 1975/DEP.NTIS 37.60:/
IC=2 906 800/
US/
US/
77.600/
CLEANING: 04 / CLINCH RIVER BREEDER REACTOR: M3 / CORROSION: 04/CORROSION PRODUCTS/CORROSIVE EFFECTS/FAILED ELEMENT
DETECTION: M,01,02,03/FFTF REACTOR:M2/FISSION PRODUCTS/LMFBR TYPE REACTORS:M1/REACTOR COMPONENTS:M4,01,02,03/REMOVAL:05/
SODIUM:M5/

12/2/0000001-0000100// 14
33R0025158 NSA-33-10 77.400
(AECL--4444)PROPERTIES OF DOUGLAS POINT GENERATING STATION HEAT TRANSPORT CORROSION PRODUCTS/

ONTFORD,B:/RUMMERY,T.E./
TOMIC ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUC[illegible] RESEARCH ESTABLISHMENT/
SEP 1975/DEP.NTIS (US SALES ONLY)$4.00./
IC=0 653 000/
CA/
CA/
CARBON STEELS/CORROSION PRODUCTS/DEPOSITS/DOUGLAS POINT ONTARIO REACTOR:M1/FILTERS/MONEL/PRIMARY COOLANT CIRCUITS:Q1/

12/2/0000001-0000100// 15
33J0025155 NSA-33-10 77.300
THE NUCLEAR POWER STATION PROJECT UTILISING A HIGH-TEMPERATURE REACTOR WITH A DIRECT-CYCLE GAS TURBINE (HHT)/
SARLOS, G. / MARKOCZY, G./ZOLLINGER,E./DUPONT,J.F./SCHENKER,E./HASCHKE,D.(EIDGENOESSISCHES INST.FUER REAKTORFORSCHUNG,
WUERENLINGEN (SWITZERLAND))/
NEUE TECH./16/11/NOV 1974/449-456/(IN FRENCH)
CH/
CH/
(NETEA)
COMPRESSORS / COOLING TOWERS /DECONTAMINATION/DIRECT CYCLE COOLING SYSTEMS:Q1/GAMMA RADIATION/GAS COOLED REACTORS/GAS
TURBINES/GERMAN FEDERAL REPUBLIC/HEAT EXCHANGERS/HTGR TYPE REACTORS:M1/NEUTRON FLUX/NUCLEAR POWER PLANTS/SPECIFICATIONS/
SWITZERLAND/

12/2/0000001-0000100// 16
33C0025146 NSA-33-10 77.300
PREOPERATIONAL CHEMICAL CLEANING OF FORT ST.VRAIN NUCLEAR GENERATING STATION SYSTEMS/
TATUM,C.B.(EBASCO SERVICE INC.,NEW YORK)/SCHUETZENDUEBEL,W.G./RIEBE,J.J./EISENHOFER,J.J./
PROC.AM.POWER CONF./37/1975/772-780/
US/
US/
(PAPWA)
ANNUAL AMERICAN POWER CONFERENCE/
CHICAGO,ILLINOIS,USA/
21 APR 1975/
DEPOSITS/REMOVAL/SECONDARY COOLANT CIRCUITS:Q1/SURFACE CLEANING/VRAIN REACTOR:M1/

12/2/0000001-0000100// 17
33C0025112 NSA-33-10 77.100
DEVELOPING A SOLVENT,PROCESS,EQUIPMENT,AND PROCEDURES FOR DECONTAMINATING THE DRESDEN-1 REACTOR/
HARMER,D.E.(DOW CHEMICAL CO.,MIDLAND,MI)/FRAUSON,F.P.JR./SNYDER,M.A./ANDERS,D.U./HOLLOWAY,J.J./
PROC.AM.POWER CONF./37/1975/282-288/
US/
US/
(PAPWA)
ANNUAL AMERICAN POWER CONFERENCE/
CHICAGO,ILLINOIS,USA/
21 APR 1975/
DECONTAMINATION:Q1/DRESDEN-1 REACTOR:M1/PERFORMANCE/SOLVENTS/SURFACE CLEANING/

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33C0025111 NSA-33-10 77.100
PROTECTING DRESDEN 1 REACTOR COOLANT MATERIALS FROM CORROSION DURING DECONTAMINATION AND AFTER RETURN TO SERVICE/
STAEHLE,R.W./
OHIO STATE UNIV.,COLUMBUS/
PROC.AM.POWER CONF./37/1975/271-281/
US/
US/
(PAPWA)
ANNUAL AMERICAN POWER CONFERENCE/
CHICAGO,ILLINOIS,USA/

APR 1975/
CORROSION PROTECTION/DECONTAMINATION/DRESDEN-1 REACTOR:M1/REACTOR COOLING SYSTEMS:Q1/SURFACE CLEANING/

12/2/0000001-0000100// 19
33C0022522 NSA-33-09 77.200
(EUR--5395(VOL.1))MANUFACTURING HIGH TEMPERATURE THERMOCOUPLES/
COVILLE,P./
COMMISSION OF THE EUROPEAN COMMUNITIES, PETTEN (NETHERLANDS) .JOINT NUCLEAR RESEARCH CENTER/UKAEA RESEARCH GROUP,
HARWELL.ATOMIC ENERGY RESEARCH ESTABLISHMENT/
SODERN,SA,SURESNES,FRANCE/
1975/
CONF-741226--P1/
INTERNATIONAL COLLOQUIUM ON HIGH-TEMPERATURE IN-PILE THERMOMETRY/
VON DER HARDT,P./ZEISSER,P./MASON,F.(EDS.)/
IC=1 910 950/6 408 000/
FR/
XE/
INTERNATIONAL COLLOQUIUM ON HIGH TEMPERATURE IN-PILE THERMOMETRY/
PETTEN,NETHERLANDS/
12 DEC 1974/
45.400/
CLEANING/FABRICATION:Q1/IN CORE INSTRUMENTS/RHENIUM/TEMPERATURE MEASUREMENT/THERMOCOUPLES:M1/TUNGSTEN/WELDING/

12/2/0000001-0000100// 20
33C0022338 NSA-33-09 77.900
PLANNING A NUCLEAR PLANT PRIMARY SYSTEM DECONTAMINATION/
KIDDAISCH,W.I./
COMMONWEALTH EDISON CO.,CHICAGO/
TRANS.AM.NUCL.SOC./22/NOV 1975/120-121/
US/
US/
(TANSA)
AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
SAN FRANCISCO,CA,USA/
16 NOV 1975/
DECONTAMINATION:Q2/DEPOSITS/NUCLEAR POWER PLANTS:M1/PLANNING/PRIMARY COOLANT CIRCUITS:M2,Q1/REMOVAL/

12/2/0000001-0000100// 21
33C0022020 NSA-33-09 77.200
MEASUREMENT OF FUEL ELEMENT CRUD DEPOSITS IN PRESSURIZED WATER REACTORS/
SOLOMON,Y./ROESMER,J./
WESTINGHOUSE ELECTRIC CORP.,PITTSBURGH/
TRANS.AM.NUCL.SOC./22/NOV 1975/551-552/
US/
US/
(TANSA)
AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
SAN FRANCISCO,CA,USA/
16 NOV 1975/
CORROSION PRODUCTS:Q1/DEPOSITS/MEASURING METHODS/PWR TYPE REACTORS:M1/REACTOR CORES/SURFACES/WATER CHEMISTRY/

12/2/0000001-0000100// 22
33C0022004 NSA-33-09 77.200
PWR RADIATION BUILDUP:THE COURSE AHEAD/
MCCORMICK,D.J./
CONSOLIDATED EDISON OF NEW YORK/
TRANS.AM.NUCL.SOC./22/NOV 1975/120/
US/

(TRANSA)
AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
SAN FRANCISCO,CA,USA/
16 NOV 1975/
DECONTAMINATION:02/HEAT EXCHANGERS:M2,01/PWR TYPE REACTORS:M1/RADIATION DOSES/REACTOR MAINTENANCE/REPAIR/

12/2/0000001-0000100// 23
23P0021998 NSA-33-09 77.100
METHOD AND APPARATUS FOR REMOVING RADIOACTIVE GASES FROM A NUCLEAR REACTOR/
FRUMERMAN,R./BROWN,W.K./
TO WESTINGHOUSE ELECTRIC CORP./
PATENT/PWR/
US PATENT 3,910,817/
FILED DATE 17 OCT 1972/
7 OCT 1975/
US/
US/
DECONTAMINATION:02/GASES/PRIMARY COOLANT CIRCUITS:M2,01/PWR TYPE REACTORS:M1/RADIOACTIVE MATERIALS/

12/2/0000001-0000100// 24
23C0021980 NSA-33-09 77.100
CHEMISTRY OF RADIOACTIVE DEPOSITS AND LABORATORY DECONTAMINATION OF SPECIMENS FROM BWR AND PWR NUCLEAR PLANTS/
ANDERS,D.W./
DOW CHEMICAL CO.,MIDLAND,MI/
TRANS.AM.NUCL.SOC./22/NOV 1975/121/
US/
US/
(TRANSA)
AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
SAN FRANCISCO,CA,USA/
16 NOV 1975/
77.200/
BWR TYPE REACTORS:M2/CHEMISTRY/DECONTAMINATION:03/DEPOSITS/PRIMARY COOLANT CIRCUITS:M3,01,02/PWR TYPE REACTORS:M1/

12/2/0000001-0000100// 25
33C0019428 NSA-33-06 77.500
STUDY OF MASS TRANSFER BY LIQUID SODIUM IN CLOSED LOOP SYSTEMS.SODIUM TECHNOLOGY DEVELOPMENT PROGRAM/
MELSTER,B.M./
NIJVERHEIDSORGANISATIE TNO/THE HAGUE/1974/
NL/
NL/
INFORMATION MEETING TNO CONTRIBUTION TO LMFBR DEVELOPMENT/
UTRECHT,NETHERLANDS/
10 MAY 1973/
CARBON / CHROMIUM ADDITIONS / CORROSION: 04 / CORROSION PRODUCTS/DEPOSITION/HIGH TEMPERATURE/LIQUID METALS/LMFBR TYPE REACTORS: M2 / MASS TRANSFER: 01, 03/NIOBIUM ADDITIONS/PRIMARY COOLANT CIRCUITS/REACTOR COOLING SYSTEMS:M3,02/SECONDARY COOLANT CIRCUITS/SODIUM:M1/SODIUM COOLED REACTORS/STAINLESS STEEL-316:M4/STAINLESS STEELS/

12/2/0000001-0000100// 26
33X0015283 NSA-33-07 77.500
(AI-ERDA--13160) SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS.QUARTERLY TECHNICAL PROGRESS REPORT, JULY--SEPTEMBER 1975/
WELCH,F.H./STEELE,D.P.III/HILL,E./
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
15 NOV 1975/AT/
IC=9 500 331/

US/
BEARINGS:M5/CLEANING:03/CLINCH RIVER BREEDER REACTOR:M8/COATINGS:04/CORROSIVE EFFECTS:07/COVER GAS/DATA/FRICTION:04,05
/ LMFBR TYPE REACTORS:M1/PERFORMANCE TESTING:06/PHYSICAL PROPERTIES/REACTOR COMPONENTS:M3,08/REACTOR COOLING SYSTEMS:M2,
01 / REACTOR MATERIALS:M4/REMOTE HANDLING EQUIPMENT/REMOVAL:07/RESEARCH PROGRAMS/SEALS:M6,02/SODIUM:M7/STAINLESS STEELS/
STORAGE:03/TRAPS/

12/2/0000001-0000100// 27
33J0015258 NSA-33-07 77.200
SPECIAL FEATURES OF EXTERNAL CORROSION OF FUEL CLADDING IN BOILING WATER REACTORS/
LUNDE,L.(INSTITUTT FOR ATOMENERGI,KJELLER (NORWAY))/
NUCL.ENG.DES./33/2/SEP 1975/178-195/
NO/
NL/
(MEDEA)
BWR TYPE REACTORS:M1/CORROSION PICKLING/CORROSION PRODUCTS/FLUORINE/FRETTING CORROSION:02/FUEL CANS:01,M2/IMPURITIES/
NITROGEN/OXYGEN/SPACERS/THERMAL CONDUCTIVITY/URANIUM/ZIRCONIUM ALLOYS/

12/2/0000001-0000100// 28
33X0015227 NSA-33-07 50.210
(HARD-WA--3045-26) SODIUM TECHNOLOGY PROGRAM: COMPONENT MATERIALS COMPATIBILITY.QUARTERLY PROGRESS REPORT FOR PERIOD
ENDING APRIL 30,1975/
RAY,W.E./
WESTINGHOUSE ELECTRIC CORP.,MADISON,PA.(USA).ADVANCED REACTORS DIV./
INTERSTITIAL TRANSFER/EFFECTS ON MECHANICAL PROPERTIES/
NOV 1975/AT/
IC=6 916 000/
US/
US/
77.500/79.200/
ALLOYS/CARBON:M2/CARBURIZATION/CHROMIUM-MOLYBDENUM STEELS:M5/CLEANING/COOLANT LOOPS/CORROSION:03,04,05,06/CORROSIVE
EFFECTS:01/CREEP/FATIGUE/HIGH TEMPERATURE/INCONEL 718:M6/INTERSTITIALS/MASS TRANSFER:02/MICROSTRUCTURE/RESEARCH PROGRAMS
/SODIUM:M1/STAINLESS STEEL-304:M4/STAINLESS STEEL-316:M3/

12/2/0000001-0000100// 29
33C0014203 NSA-33-06 77.700
(CONF-750827--)DECOMMISSIONING AND DECONTAMINATION OF LICENSED REACTOR FACILITIES AND DEMONSTRATION NUCLEAR POWER
PLANTS/
LEAR,G./ERICKSON,P.B./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
NUCLEAR REGULATORY COMMISSION,WASHINGTON,DC/
SEP 1975/
PROCEEDINGS OF THE FIRST CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING (D AND D)OF ERDA FACILITIES/
IC=9 501 173/0 047 300/
US/
US/
CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
DECONTAMINATION / LEGAL ASPECTS / NUCLEAR POWER PLANTS: M2/REACTOR DECOMMISSIONING:M3,01,02/REGULATIONS:03/RESEARCH
REACTORS:M1/US NRC/

12/2/0000001-0000100// 30
33C0014093 NSA-33-06 77.900
(CONF-750627--)DECOMMISSIONING PLAN FOR THE HEAVY WATER COMPONENTS TEST REACTOR/
FIELD,F.P./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,

FALLS,IDAHO (USA)/
..I.DU PONT DE NEMOURS AND CO.,AIKEN,SC/
SEP 1975/
PROCEEDINGS OF THE FIRST CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING (D AND D)OF ERDA FACILITIES/
IC*9 501 173/0 047 300/
US/
US/
CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
77.600/
ACTIVITY LEVELS/DECONTAMINATION/HWCTR REACTOR:MI/PLANNING/REACTOR DECOMMISSIONING:01/REACTOR SITES/

12/2/0000001-0000100// 31
33C0014082 NSA-33-06 77.900
(CONF-750827--) PREPARATIONS FOR DECONTAMINATION AND DISPOSITION OF THE SODIUM REACTOR EXPERIMENT (SRE)AND OTHER ERDA
FACILITIES AT AI/
HEINE,W.F./GRAVES,A.W./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
ATOMICS INTERNATIONAL,CANOGA PARK,CA/
SEP 1975/
PROCEEDINGS OF THE FIRST CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING (D AND D)OF ERDA FACILITIES/
IC*9 501 173/0 047 300/
US/
US/
CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
77.600/
DECONTAMINATION/PLANNING/REACTOR DISMANTLING:01/SRE REACTOR:MI/

12/2/0000001-0000100// 32
33C0014081 NSA-33-06 77.900
(CONF-750827--)DECONTAMINATION AND DECOMMISSIONING EXPERIENCE AT EXPERIMENTAL BREEDER REACTOR NO.1/
KENDALL,E.W./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
AEROJET NUCLEAR CORP.,IDAHO FALLS,ID/
SEP 1975/
PROCEEDINGS OF THE FIRST CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING (D AND D)OF ERDA FACILITIES/
IC*9 501 173/0 047 300/
US/
US/
CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
77.600/40.420/
DECONTAMINATION:01/EBR-1 REACTOR:MI/LIQUID METALS/POTASSIUM ALLOYS/REACTOR DECOMMISSIONING:01/REACTOR DISMANTLING/
REACTOR SITES/REMOVAL/SODIUM ALLOYS/SURFACE CLEANING/

12/2/0000001-0000100// 33
33C0014080 NSA-33-06 77.900
(CONF-750827--)DECONTAMINATION AND DISPOSITION OF HALLAM AND PIQUA REACTORS/
HEINE,W.F./UREDA,B.F./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
ATOMICS INTERNATIONAL,CANOGA PARK,CA/

-1975/
PROCEEDINGS OF THE FIRST CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING (D AND D)OF ERDA FACILITIES/
IC=9 501 173/0 047 300/
US/
US/
CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
77.300/77.400/
ACTIVITY LEVELS / DECONTAMINATION:Q1,Q2/HNPF REACTOR:M1/PNPF REACTOR:M2/RADIOACTIVITY/REACTOR DECOMMISSIONING/REACTOR DISMANTLING:M,Q1,Q2/REACTOR SITES/SHIELDING/

12/2/0000001-0000100// 34
33C0014079 NSA-33-06 77.900
(CONF-750827--)PROGRAM PLAN FOR REMOVAL OF THE MATERIALS TEST REACTOR OVERHEAD WORKING RESERVOIR/
LUNIS,S.C./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO., IDAHO FALLS,IDAHO (USA)/
AEROJET NUCLEAR CO.,IDAHO FALLS,ID/
SEP 1975/
PROCEEDINGS OF THE FIRST CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING (D AND D)OF ERDA FACILITIES/
IC=9 501 173/0 047 300/
US/
US/
CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
77.600/40.420/
ACTIVITY LEVELS/DECONTAMINATION/MTR REACTOR:M1/NUCLEAR FACILITIES/REACTOR DISMANTLING:Q1/REMOVAL/TANKS/

12/2/0000001-0000100// 35
33C0014024 NSA-33-06 77.600
(CONF-750827--)PROGRAM PLAN FOR DECONTAMINATION AND DECOMMISSIONING THE MATERIALS TESTING REACTOR AT THE INEL/
JONES,T.F./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO., IDAHO FALLS,IDAHO (USA)/
AEROJET NUCLEAR CORP.,IDAHO FALLS,ID/
SEP 1975/
PROCEEDINGS OF THE FIRST CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING (D AND D)OF ERDA FACILITIES/
IC=9 501 173/0 047 300/
US/
US/
CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
DECONTAMINATION/MTR REACTOR:M1/PLANNING/REACTOR DECOMMISSIONING/REACTOR DISMANTLING:Q1/

12/2/0000001-0000100// 36
33X0013994 NSA-33-06 77.300
(ORNL-TM--5173) FINAL REPORT OF THE LMFBR CAMPAIGN OF THE EXPERIMENTAL ENGINEERING SECTION OFF-GAS DECONTAMINATION FACILITY,MARCH--JULY 1975/
KLEIN,J.A./GILLIAM,T.M./
OAK RIDGE NATIONAL LAB.,TENN.(USA)/
JAN 1976/AT/
IC=4 832 000/
US/
US/
DECONTAMINATION/EFFICIENCY/KRYPTON/LMFBR TYPE REACTORS:M1/OFF-GAS SYSTEMS:M2,Q1/PERFORMANCE TESTING:Q2/

011397 NSA-33-05 79.700
DOCKET-50259--677)BROWNS FERRY NUCLEAR POWER STATION,UNITS 1 AND 3.SEMIANNUAL REPORT,JANUARY--JUNE 1975/
TENNESSEE VALLEY AUTHORITY,CHATTANOOGA (USA)/
1975/
DOCKET-50260--455/DOCKET-50296--230/DEP.NTIS $5.00./
IC=6 170 500/
US/
US/
77.100/
BROWNS FERRY-1 REACTOR:M1/BROWNS FERRY-2 REACTOR:M2/BROWNS FERRY-3 REACTOR/CLEANING/DECONTAMINATION/ENVIRONMENT/FIRES:
M. 01, 02 / MONITORING/PERSONNEL/RADIATION DOSES/RADIOACTIVE WASTE MANAGEMENT/RADIOCHEMISTRY/REACTOR MAINTENANCE/REACTOR
OPERATION:01,02/

12/2/0000001-0000100// 38
33C0011329 NSA-33-05 77.900
(ANS-SD--15)MINIMIZING RADIATION EXPOSURES IN PWR PLANTS/
CLEMONS,L.JR.(WESTINGHOUSE ELECTRIC CORP.,MONROEVILLE,PA)/BATTAGLIA,J.A./
AMERICAN NUCLEAR SOCIETY,OAK RIDGE,TENN./
NOV 1975/
CONF-750661--1/
PROCEEDINGS OF THE SPECIAL SESSION ON PLANT AND EQUIPMENT DESIGN FEATURES FOR RADIATION PROTECTION,NEW ORLEANS,
LOUISIANA,JUNE 8--13,1975/
IC=0 282 000/
US/
US/
SPECIAL SESSION OF THE ANS ON PLANT AND EQUIPMENT AND DESIGN FEATURES FOR RADIATION PROTECTION/
NEW ORLEANS,LOUISIANA,USA/
8 JUN 1975/
77.200/
DECONTAMINATION / DESIGN / NUCLEAR POWER PLANTS:M2/PERSONNEL:M3/PWR TYPE REACTORS:M1/RADIATION PROTECTION:03/REACTOR
MAINTENANCE:01,02/SHIELDING/

12/2/0000001-0000100// 39
33C0009776 NSA-33-05 50.210
(AECL--5227)MATERIALS RESEARCH IN AECL/
ATOMIC ENERGY OF CANADA LTD.,CHALK RIVER,ONTARIO.CHALK RIVER NUCLEAR LABS./
TRANSPORT OF RADIOACTIVATED CORROSION PRODUCTS IN REACTORS/
SUM 1975/DEP.NTIS (US SALES ONLY)$4.50.AECL $1.00./
IC=0 643 000/
CA/
CA/
77.900/
BOILERS / COBALT 60:M4/CONTAMINATION:02,03/COPPER/CORROSION PRODUCTS:M1/DECONTAMINATION:03/DEPOSITION:04/DISSOLUTION/
DOUGLAS POINT ONTARIO REACTOR: M3 / ELECTROCHEMISTRY / FILTERS /ION EXCHANGE MATERIALS/MATHEMATICAL MODELS/OXIDATION/
RADIOACTIVATION:01/REACTOR COOLING SYSTEMS:M2/REACTOR MATERIALS/RESEARCH PROGRAMS/

12/2/0000001-0000100// 40
33C0005691 NSA-33-04 77.300
(KFD-CONF--75-233-003)RELEASE AND DEPOSITION OF FISSION PRODUCTS/
NIELKEN,G./
KERNFORSCHUNGSANLAGE JUELICH G.M.B.H.(F.R.GERMANY)PROJEKT HOCHTEMPERATURREAKTOR MIT HELIUMTURBINEN/
HTGR/
1975/(IN GERMAN)INIS/
IC=9 200 109/
DE/
DE/
PROJECT HIGH-TEMPERATURE REACTOR WITH HELIUM TURBINE - STATUS REPORT/
JUELICH,F.R.GERMANY/

JUN 1975/
...IUM 134/CESIUM 137/COATED FUEL PARTICLES:M1/DECONTAMINATI... ...POSITION/FISSION FRAGMENTS/FISSION PRODUCT RELEASE:Q1
/GRAPHITE / HTGR TYPE REACTORS:M2/IODINE 131/KRYPTON 88/RADIONUCLIDE KINETICS:Q3/RADIONUCLIDE MIGRATION/REACTOR COOLING
SYSTEMS:M3,Q2/SILVER 110/STRONTIUM 90/TELLURIUM 129/XENON 133/

12/2/0000001-0000100// 41
33C0007887 NSA-33-04 50.300
(CONF-751121--1)TESTING OF COATINGS FOR THE NUCLEAR INDUSTRY/
GOLDBERG,G./
OAK RIDGE NATIONAL LAB.,TENN.(USA)/
1975/DEP.NTIS $4.50./
IC=4 832 000/
US/
US/
SOUTHEASTERN REGIONAL MEETING OF THE NATIONAL ASSOCIATION OF CORROSION ENGINEERS/
BUENA VISTA,FLORIDA,USA/
9 NOV 1975/
77.000/40.420/
COATINGS:M2, Q1 / COOLANT LOOPS/DECONTAMINATION:Q2/DESIGN BASIS ACCIDENTS/NUCLEAR POWER PLANTS:M1/RADIATION EFFECTS/
SIMULATION/STABILITY/TEST FACILITIES/TESTING:Q2/

12/2/0000001-0000100// 42
33X0006737 NSA-33-03 77.500
(HEDL-TME--75-31)HEDL QUARTERLY TECHNICAL REPORT,JANUARY,FEBRUARY,MARCH 1975/
ATWOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
LMFBR/
MAY 1975/AT/
IC=2 906 800/
US/
US/
77.600/
CLEANING:Q3/CORROSION:Q3/CORROSION PRODUCTS/CORROSIVE EFFECTS:Q4/COVER GAS/DECONTAMINATION/FAILED ELEMENT DETECTION:
Q1,Q2/FFTF REACTOR:M2/FISSION PRODUCTS/LMFBR TYPE REACTORS:M1/REACTOR COMPONENTS:M3,Q1,Q2/REMOVAL:Q4/SODIUM:M4/

12/2/0000001-0000100// 43
33F0006705 NSA-33-03 77.300
(RD/B/N--3439)EXAMINATION OF CORROSION ON PRIMARY SELECTOR VALVE BELLOWS/
RICKARDS,G.K./
CENTRAL ELECTRICITY GENERATING BOARD,BERKELEY (UK).BERKELEY NUCLEAR LABS./
JUL 1975/DEP.NTIS (US SALES ONLY)$4.50./
IC=1 559 000/
GB/
GB/
CLEANING / CORROSION / ELECTRON MICROSCOPY / FAILED ELEMENT MONITORS:Q1/INORGANIC ACIDS/SEALS/SIZEWELL-A REACTOR:M1/
STAINLESS STEEL-18-8/VALVES/

12/2/0000001-0000100// 44
33P0004897 NSA-33-02 79.200
METHOD AND APPARATUS FOR REVERSE CIRCULATING NUCLEAR STEAM GENERATOR SECONDARY FLUID/
STITELER,F.Z./MONIGMANN,R.L./
TO COMBUSTION ENGINEERING,INC./
PATNET/
US PATENT 3,900,010/
FILED DATE 19 APR 1974/
19 AUG 1975/
US/
US/

LEANING/CONFIGURATION/LIQUID FLOW/POWER REACTORS:M1/STEAM ... ATORS:M1,Q1/TWO-PHASE FLOW/

12/2/0000001-0000100// 45
33J0004880 NSA-33-02 79.100
SODIUM ENTRAINMENT IN AN ARGON FLOW:THE EVAPORATION AND CONDENSATION PROCESSES/
EGLEME,M./MICHEL,A./
PROG.HEAT MASS TRANSFER/1973/503-516/
GB/
GB/
(PGHME)
ARGON / ENTRAINMENT/EVAPORATION:Q3/FUEL ASSEMBLIES:M2,Q1/FUEL RODS/REMOVAL/SODIUM:M3/SODIUM COOLED REACTORS:M1/SURFACE CLEANING:Q2/TEMPERATURE DEPENDENCE/

12/2/0000001-0000100// 46
33R0004703 NSA-33-02 77.600
(ANCR--1170)DECONTAMINATION AND DECOMMISSIONING OF THE EBR-I COMPLEX.TOPICAL REPORT NO.3.NAK DISPOSAL PILOT PLANT TEST /
COMMANDER,J.C./LEWIS,L./HAMMER,R./
AEROJET NUCLEAR CO.,IDAHO FALLS,IDAHO (USA).IDAHO NATIONAL ENGINEERING LAB./
JUN 1975/DEP.NTIS $4.00./
IC=9 501 267/
US/
US/
DECOMMISSIONING:Q1/DECONTAMINATION:Q1/EBR-1 REACTOR:M1/NAK COOLED REACTORS/RADIOACTIVE WASTE DISPOSAL:Q1/

12/2/0000001-0000100// 47
33R0004534 NSA-33-02 77.200
(CENPD--67(REV.1)(ADD.2))IODINE DECONTAMINATION FACTORS DURING PWR STEAM GENERATION AND STEAM VENTING.TOPICAL REPORT/
COMBUSTION ENGINEERING,INC.,WINDSOR,CONN.(USA)/
AUG 1975/COMBUSTION ENGINEERING,INC.,WINDSOR,CT./
IC=1 887 000/
US/
US/
DECONTAMINATION: Q3 / EFFICIENCY / IODINE: M2, Q1/PRIMARY COOLANT CIRCUITS:M3,Q1/PWR TYPE REACTORS:M1/REMOVAL:Q2/STEAM GENERATORS/

12/2/0000001-0000100// 48
33J0004631 NSA-33-02 77.100
EFFECT OF DISSOLVED OXYGEN ON DEPRESSION OF THE CRUD FORMATION IN FEED WATER SYSTEM OF BWR/
MIZUNO,T./IWAHORI,T.(CENTRAL RESEARCH INST.OF ELECTRIC POWER INDUSTRY,KOMAE,TOKYO (JAPAN).TECHNICAL LAB.NO.1)/
DENRYOKU CHUO KENKYUSHO GIJUTSU DAIICHI KENKYUSHO HOKOKU/74011/JUL 1974/1-4,1-18/(IN JAPANESE)
JP/
JP/
(DCKDB)
BWR TYPE REACTORS: M3 / CHEMICAL REACTION KINETICS/CORROSION PRODUCTS/CORROSION PROTECTION:Q1,Q2/ELECTRIC POTENTIAL/ EQUILIBRIUM /FEEDWATER/FLOW RATE/IRON/OXYGEN/PASSIVITY/PH VALUE/PITTING CORROSION/PRIMARY COOLANT CIRCUITS:M2,Q3/STEELS: M1/TEMPERATURE DEPENDENCE/

12/2/0000001-0000100// 49
33C0002993 NSA-33-02 44.310
(ORP / CSD--75-1(VOL. 2)) PROCEEDINGS OF PUBLIC HEARINGS: PLUTONIUM AND THE OTHER TRANSURANIUM ELEMENTS.VOLUME 2. PROCEEDINGS OF HEARINGS IN DENVER,COLORADO,JANUARY 10,1975/
ENVIRONMENTAL PROTECTION AGENCY,WASHINGTON,D.C.(USA).OFFICE OF RADIATION PROGRAMS/
IMPACT OF RELEASE OF PU AND OTHER TRANSURANIUM ELEMENTS TO THE ENVIRONMENT ON HEALTH OF HUMAN POPULATIONS/
1975/
CONF-750133--P2/ENVIRONMENTAL PROTECTION AGENCY,WASHINGTON,DC./
IC=9 500 472/
US/

US/
US/
77.000/
DECONTAMINATION: 01, 02 / EBR-1 REACTOR:M1/HAZARDS/POTASSIUM/REACTOR DECOMMISSIONING:01,02/REACTOR DISMANTLING/SODIUM/
EPR-3 REACTOR:M2/

12/2/0000001-0000100// 54
33J0002276 NSA-33-01 77.100
TRANSPORT OF RADIOACTIVE CORROSION PRODUCTS IN HIGH-TEMPERATURE WATER.I.RECIRCULATING LOOP EXPERIMENTS/
LISTER,D.H./
CHALK RIVER NUCLEAR LABS.,ONTARIO/
PWR AND BWR/
NUCL.SCI.ENG:75B/2/OCT 1975?239-251/
CA/
US/
(NSENA)
77.200/
BWR TYPE REACTORS: M2/CORROSION PRODUCTS:03/DEPOSITION/LIQUID FLOW/MOCKUP/PRIMARY COOLANT CIRCUITS:M3,01,02/PWR TYPE REACTORS:M1/

12/2/0000001-0000100// 55
33C0002250 NSA-33-01 77.000
(INIS-MF--1702)DEVELOPMENT OF TECHNICAL MEANS FOR DECONTAMINATION OF RADIOACTIVE EQUIPMENT OF NUCLEAR POWER PLANTS/
VLASOV,I.N./VORONEZHEV,L.N./DREKHOV,V.M./SEDOV,V.M./SIMANOVSKII,YU.M./
GOSUDARSTVENNYJ KOMITET PO ISPOL'ZOVANIYU ATOMNOJ EHNERGII SSSR,MOSCOW/
1974/(IN RUSSIAN)
CONF-740610B--9/
NUCLEAR POWER PLANT OPERATING EXPERIENCE AND PROSPECTS OF NUCLEAR POWER ENGINEERING.VOL.2/
IC=2 846 000/
SU/
XA/
JUBILEE CONFERENCE DEDICATED TO THE TWENTIETH ANNIVERSARY OF NUCLEAR POWER ENGINEERING/
OBNINSK,USSR/
25 JUN 1974/
DECONTAMINATION:02/DEPOSITS/NUCLEAR POWER PLANTS:M1/REACTOR COMPONENTS:M2,01/

12/2/0000001-0000100// 56
32K0030235 NSA-32-12 77.500
(AI-ERDA--13147) SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS.QUARTERLY TECHNICAL PROGRESS REPORT, JANUARY--MARCH 1975/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/FFTF/
15 MAY 1975/AT/
IC=9 500 331/
US/
US/
77.500/50.330/
CLEANING:04/COATINGS/ELASTOMERS:M3/FFTF REACTOR:M2/FRICTION:05/LMFBR TYPE REACTORS:M1/PERFORMANCE TESTING:06/PHYSICAL PROPERTIES:07,08/REACTOR COMPONENTS:M4/REACTOR COOLING SYSTEMS:M3,01,02/REACTOR MATERIALS:M5/RESEARCH PROGRAMS:03/SEALS: M6/SILICONES:M7/SODIUM/SOLVENT PROPERTIES/SOLVENTS/

12/2/0000001-0000100// 57
32C0030192 NSA-32-12 77.400
(AED-CONF--73-562-003) SCANNING ELECTRON MICROSCOPY AND ENERGY DISPERSIVE X-RAY MICROANALYSIS OF NUCLEAR REACTOR CORROSION PARTICLES/
WIKJORD,A.G./MAYOR,G.H./DORN,F.E./
ATOMIC ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT/
(ND)/

73:173--1/1NIS/
653 000/
CA/
XA/
SYMPOSIUM ON WATER QUALITY PARAMETERS-SELECTION,MEASUREMENT AND MONITORING/
BURLINGTON,ONTARIO,CANADA/
19 NOV 1973/
CANDU TYPE REACTOR:M1/CORROSION PRODUCTS:Q2/ELECTRON MICROSCOPY/PARTICLE SIZE/PARTICLES/REACTOR COOLING SYSTEMS:M2,Q1/
X-RAY SPECTROSCOPY/

12/2/0000001-0000100// 58
32J0030139 NSA-32-12 77.100
HYDROGEN RECOMBINATION SYSTEM FOR LIGHT-WATER REACTORS,AFTER A LOSS-OF-COOLANT ACCIDENT/
HENRIE,J.O.(ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA))/GREGOR,F.E./HONKALA,J.W.(DETROIT EDISON CO.,MICH.(USA)
)/
ARCH.ENERGIEWIRTSCH./29/5/MAY 1975/460-461/(IN GERMAN)
US/
DE/
(AVEWA)
77.200/
PRIMARY MIXTURES/PWR TYPE REACTORS:M1/CORROSION PRODUCTS/DESIGN BASIS ACCIDENTS/ENRICO FERMI-2 REACTOR/HYDROGEN/LOSS OF
COOLANT / MIXING RATIO / OXIDATION / OXYGEN / PWR TYPE REACTORS: M2/RADIOLYSIS/RECOMBINERS:M3,Q1,Q2/SAFETY STANDARDS/
SPECIFICATIONS:Q3/WATER/ZIRCONIUM/

12/2/0000001-0000100// 59
32J0030137 NSA-32-12 77.100
RECYCLING ION EXCHANGE RESINS/
LANNIN,T.E./
GENERAL ELCTRIC CO.,PLEASANTON,CA/
BWR FEED WATER DEMINERALIZER RESINS/
POWER ENG./79/9/SEP 1975/52-54/
US/
US/
(PCENA)
BWR TYPE REACTORS: M1 / CLEANING: Q2 / COOLANT CLEANUP SYSTEMS:M3,Q1/DEMINERALIZERS:M2,Q3/FEEDWATER/ION EXCHANGE/ION
EXCHANGE MATERIALS/REACTOR COOLING SYSTEMS/REPROCESSING/RESINS/WASTE DISPOSAL/WATER CHEMISTRY/

12/2/0000001-0000100// 60
32C0027418 NSA-32-11 79.200
(CONF-701074--P2)PROSPECTS OF THE USE OF COMPLEXONES IN NUCLEAR POWER ENGINEERING/
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE "ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS"/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
CLEANING/CORROSION INHIBITORS/CORROSION PROTECTION/REACTOR COOLING SYSTEMS:M1/SURFACES/WATER CHEMISTRY:Q1/

12/2/0000001-0000100// 61
32J0027259 NSA-32-11 77.400
AUTORADIOGRAPHY AND SCANNING ELECTRON MICROSCOPY OF HEAT TRANSPORT PARTICULATES/
VERRIS,S.L./
ONT.HYDRO RES.Q./26/3/1974/25-29/
CA/
CA/
(CHRQA)
AUTORADIOGRAPHY/CORROSION PRODUCTS/ELECTRON MICROSCOPY/FILTERS/PARTICLES/PICKERING-1 REACTOR:M1/PICKERING-2 REACTOR:M2

PICKERING-A REACTOR:M2/PICKERING-A REACTOR:M6/RADIATION MON[illegible]NG/REACTOR COOLING SYSTEMS:01,02,03,26/

12/2/0000001-0000100// 52
32J0027268 NSA-32-11 77.400
SOURCE AND NATURE OF RADIOACTIVITY IN NUCLEAR REACTOR SYSTEMS/
NEIL,D.C.J./
ONT.HYDRO RES.CO./26/3/1974/3-11/
CA/
CA/
(CHRCA)
CONTAMINATION / CORROSION PRODUCTS /DECONTAMINATION/GAMMA SPECTROSCOPY/PHWR TYPE REACTORS:M1/RADIATION MONITORING:01/
RADIOACTIVATION/REACTOR COOLING SYSTEMS/

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32J0027267 NSA-32-11 77.400
CORROSION AND RADIOACTIVITY DEPOSITION ON METAL COUPONS EXPOSED IN A REACTOR SYSTEM/
VERRIS,S.U./
PHWR/
ONT.HYDRO RES.CO./26/3/1974/12-17/
CA/
CA/
(CHRCA)
CARBON STEELS / CORROSION /CORROSION PRODUCTS:02/DECONTAMINATION/DEPOSITION/FILMS/NONEC/OXIDES/PHWR TYPE REACTORS:M1/
RADIATION MONITORING/REACTOR COOLING SYSTEMS:M2,01/STAINLESS STEELS/ZIRCALOY 2/

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32J0027266 NSA-32-11 77.400
SOME ASPECTS OF CHEMICAL AND RADIOCHEMICAL ANALYSIS FOR THE CANDU REACTOR SYSTEM/
GUEST,A./
PHWR/
ONT.HYDRO RES.CO./26/3/1974/19-24/
CA/
CA/
(CHRCA)
ABSORPTION SPECTROSCOPY/CHEMICAL COMPOSITION/CORROSION PRODUCTS:02/GAMMA SPECTROSCOPY/HEAVY WATER/PARTICLES/PHWR TYPE
REACTORS:M1/RADIATION MONITORING/RADIOISOTOPES/REACTOR COOLING SYSTEMS:M2,01/

12/2/0000001-0000100// 65
32J0027221 NSA-32-11 77.200
(CONF-701074--P2) ANALYSIS OF THE PROCESSES OF ACCUMULATION OF FISSION PRODUCTS IN THE PRELIMINARY CIRCUIT OF THE
WATER-MODERATED WATER-COOLED POWER REACTOR/
MIRONOV,V.N./TEPLOV,P.V./KAZAKOV,V.A./
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
CONTAMINATION / CORROSION PRODUCTS / DEPOSITION /FISSION PRODUCT RELEASE/FISSION PRODUCTS/MATHEMATICAL MODELS/PRIMARY
COOLANT CIRCUITS:01/WWER-1 REACTOR:M1/

12/2/0000001-0000100// 66
32C0027215 NSA-32-11 77.100
(CONF-701074--P2) METHOD OF ESTIMATION OF FISSION-FRAGMENT ACTIVITY IN THE COOLANT,DISCHARGE FROM INDUSTRIAL ATOMIC
ELECTRIC POWER PLANTS HAVING ROD-TYPE FUEL ELEMENTS,COOLED BY BOILING WATER/
GUSEINOV,A.G./KOBOZOV,M.G./KHARIZOMENOV,U.V./
1970/

PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
SWR TYPE REACTORS:M1 / CONTAMINATION/CORROSION PRODUCTS/DEPOSITION/FISSION PRODUCT RELEASE:01/FISSION PRODUCTS/FUEL ELEMENT FAILURE/PRIMARY COOLANT CIRCUITS/

12/2/0000001-0000100// 67
32C0027214 NSA-32-11 77.100
(CONF-701074--P2)QUESTION OF EXPLOITATION OF ION-EXCHANGE FILTERS FOR SINGLE CIRCUIT ATOMIC ELECTRIC POWER PLANTS/
CHECHETKIN,U.V./ZABELIN,A.I./ROZDESTVENSAKAYA,L.N./KIZIN,V.D./YASHIN,E.K./MASNAYA,L.N./
SWR/
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
SWR TYPE REACTORS: M1/DATA/DECONTAMINATION/FILTERS:02/FISSION PRODUCTS/ION EXCHANGE MATERIALS/PURIFICATION/RADIATION MONITORING/REACTOR COOLING SYSTEMS:M2,01/STEAM CONDENSERS/VK-50 REACTOR/WATER CHEMISTRY/

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32C0027213 NSA-32-11 77.100
(CONF-701074--P2) DISTRIBUTION OF DEPOSITS AND THEIR ACTIVITY:ON THE SURFACES OF EQUIPMENT AND COMMUNICATIONS OF A SINGLE-CIRCUIT ATOMIC ELECTRIC POWER PLANT/
CHECHETKIN,U.V./ZABELIN,A.I./ROZDESTVENSKAYA,L.N./KIZIN,V.D./SYVATESHEVA,T.S./
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
UR
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
CORROSION PRODUCTS / DATA /DEPOSITION/FISSION PRODUCTS/RADIATION MONITORING/REACTOR COOLING SYSTEMS:01/SURFACES/VK-50 REACTOR:M1/WATER CHEMISTRY/

12/2/0000001-0000100// 69
32P0025461 NSA-32-10 79.200
CLEANING CONTAMINATED SURFACES OF NUCLEAR POWER PLANTS AND RECOVERY OF REMOVED SURFACE PARTICLES/
KORN,R./SEYD,G./PAULSEN,U./
TO SIEMENS AKTIENGESELLSCHAFT/
PATENT/WATER COOLED AND HEAVY WATER COOLED REACTORS/
US PATENT 3,895,465/
PRIORITY DATE 4 DEC 1972,F.R.GERMANY/
22 JUL 1975/
DE/
US/
BORON OXIDES / DECONTAMINATION: 03/HEAVY WATER COOLED REACTORS:M2/PRIMARY COOLANT CIRCUITS/STEAM GENERATORS:M3,01,02/ SURFACE CLEANING/WATER COOLED REACTORS:M1/

12/2/0000001-0000100// 70
32P0025459 NSA-32-10 79.200
METHOD OF CLEANING NUCLEAR POWER PLANTS/
KORN,R./SEYD,G./PAULSEN,U./
TO SIEMENS AKTIENGESELLSCHAFT/

IT/WATER COOLED AND HEAVY WATER COOLED POWER REACTORS/
TENT 3,894,364/
PRIORITY DATE 4 DEC 1972,F.R.GERMANY/
15 JUL 1975/
GE/
US/
BORON OXIDES/DECONTAMINATION:Q4/HEAVY WATER COOLED REACTORS:M3/PIPES/POWER REACTORS:M1/PRIMARY COOLANT CIRCUITS:M4,Q1,
Q2,Q3/PUMPS/STEAM CONDENSERS/STEAM GENERATORS/SURFACE CLEANING/WATER COOLED REACTORS:M2/

12/2/0000001-0000100// 71
32R0025359 NSA-32-10 77.900
(ANCR--1243)SAFETY ANALYSIS REPORT.DECONTAMINATION AND DECOMMISSIONING OF THE EBR-I COMPLEX/
COMMANDER,J.C./MACBETH,P.J./MICHELS,D.E./
AEROJET NUCLEAR CO.,IDAHO FALLS,IDAHO (USA)/
JUN 1975/
SAR--74-3/DEP.NTIS $5.45./
IC=0 047 300/
US/
US/
77.500/
DECONTAMINATION/EBR-1 REACTOR:M1/HAZARDS/POTASSIUM/REACTOR COMPONENTS/REACTOR DECOMMISSIONING:Q1/SODIUM/

12/2/0000001-0000100// 72
32J0025295 NSA-32-10 77.500
TRANSPORT MODEL FOR RADIOACTIVE CORROSION PRODUCT DEPOSITION IN AN LMFBR/
CLOPER,M.H./TAYLOR,G.R.(WESTINGHOUSE ELECTRIC CORP.,MADISON,PA.(USA).ADVANCED REACTORS DIV.)/
NUCL.ENG.DES./32/2/1975/246-251/
US/
NL/
(NEDEA)
COBALT 58 / COBALT 60 / CORROSION /CORROSION PRODUCTS:Q2/DEPOSITION/FUEL CANS/GAMMA RADIATION/IRRADIATION/LMFBR TYPE
REACTORS:M1/MANGANESE 54/MASS TRANSFER/PRIMARY COOLANT CIRCUITS:M2,Q1/REACTOR CORES/STAINLESS STEELS/

12/2/0000001-0000100// 73
32R0024056 NSA-32-09 79.700
(DOCKET-50255--543)PALISADES NUCLEAR PLANT.SEMIANNUAL OPERATING REPORT.JANUARY--JUNE 1975/
CONSUMERS POWER CO.,JACKSON,MICH.(USA)/
SEMIANNUAL OPERATING REPORT,JANUARY--JUNE 1975/
29 AUG 1975/DEP.NTIS $19.75./
IC=1 989 000/
US/
US/
77.200/
AUXILIARY WATER SYSTEMS / CLEANING /CONTAINMENT/CONTROL ROD DRIVES/CONTROL SYSTEMS/CRACKS/ENGINEERED SAFETY SYSTEMS/
ENVIRONMENT / FEEDWATER / FEEDWATER HEATERS / FISSION PRODUCT RELEASE/GASEOUS WASTES/LEAKS/LIQUID WASTES/METEOROLOGY/
MONITORING / NEUTRON DETECTORS / NOISE /OFF-GAS SYSTEMS/PALISADES-1 REACTOR:M1/PIPE FITTINGS/POWER GENERATION/RADIATION
MONITORING / RADIOACTIVE EFFLUENTS/REACTOR MAINTENANCE/REACTOR OPERATION:Q1/REACTOR SHUTDOWN/REPAIR/ROTORS/SCRAM/SEALS/
SECONDARY COOLANT CIRCUITS/SOLENOIDS/STEAM GENERATORS/STEAM LINES/STEAM SEPARATORS/TESTING/TUBES/TURBINES/VALVES/WATER
CHEMISTRY/

12/2/0000001-0000100// 74
32R0024013 NSA-32-09 79.300
IMPROVEMENTS IN OR RELATING TO THE DECONTAMINATION OF FUEL ELEMENT SHEATHS/
ROBERTSON,R.I./ORR,T.F./
TO BRITISH NUCLEAR FUELS LTD./
PATENT/
BRITISH PATENT 1,382,915/B//
FILED DATE 25 APR 1972/

FEB 1975/
UK/
UK/
DECONTAMINATION:01 / DIAGRAMS/ELECTRIC SPARKS/ELECTRODES/FUEL CANS:M1/INERT ATMOSPHERE/LABORATORY EQUIPMENT/ROTATION/
SPECIFICATIONS/SURFACE CLEANING/SURFACE CONTAMINATION/

12/2/0000001-0000100// 75
32C0023624 NSA-32-09 77.500
(JUL--11(ED.1))DETERMINATION OF RADIONUCLIDES IN THE PRIMARY COOLANT LOOP OF SODIUM-COOLED NUCLEAR REACTORS/
STAAA,H.H./
KERNFORSCHUNGSANLAGE JUELICH G. M. B. H. (F.R.GERMANY).ZENTRALINSTITUT FUER ANALYTISCHE CHEMIE/KERNFORSCHUNGSZENTRUM
KARLSRUHE (F.R.GERMANY).INST.FUER RADIOCHEMIE/
NOV 1974/(IN GERMAN)
AED-CONF--73-702-003/INIS/
WORKSHOP ON MODERN ANALYTICAL METHODS.VOL.1/
STOEPPLER,M.(ED.)/
IC=9 200 173/3 588 000/
GE/
GE/
WORKSHOP ON MODERN ANALYTICAL METHODS/
JUELICH,F.R.GERMANY/
15 OCT 1973/
ACTIVATION ANALYSIS:03/CONTAMINATION:01/CORROSION PRODUCTS/DISTILLATION/DISTRIBUTION/FISSION PRODUCTS/IMPURITIES/KRK
REACTOR/LIQUID METALS/LMFBR TYPE REACTORS:M2/PRIMARY COOLANT CIRCUITS:M1.02/RADIOACTIVATION/SAMPLING/SODIUM:M3/SODIUM 24
/

12/2/0000001-0000100// 76
32C0023623 NSA-32-09 77.500
(JUL--11(ED. 1)) DETERMINATION OF /SUP 89/SR AND /SUP 90/SR IN THE DEVELOPMENT OF HTR-FUEL ELEMENTS AND OF IODINE IN
SPREADING EXPERIMENTS/
STOEPPLER,M./MAY,K./MATTHES,W./
KERNFORSCHUNGSANLAGE JUELICH G. M. B. H. (F.R.GERMANY).ZENTRALINSTITUT FUER ANALYTISCHE CHEMIE/KERNFORSCHUNGSZENTRUM
KARLSRUHE (F.R.GERMANY).INST.FUER RADIOCHEMIE/
NOV 1974/(IN GERMAN)
AED-CONF--73-702-002/INIS/
WORKSHOP ON MODERN ANALYTICAL METHODS.VOL.1/
STOEPPLER,M.(ED.)/
IC=9 200 173/3 588 000/
GE/
GE/
WORKSHOP ON MODERN ANALYTICAL METHODS/
JUELICH,F.R.GERMANY/
15 OCT 1973/
(A) CHEMICAL ANALYSIS: 03 / (A)DECONTAMINATION/(A)DISSOLUTION/(A)FISSION PRODUCTS/(A)GRAPHITE:M3/(A)HTGR TYPE
REACTORS / (A) ION EXCHANGE CHROMATOGRAPHY/(A)RADIOCHEMICAL ANALYSIS:01.02/(A)SPENT FUEL ELEMENTS/(A)SPHERES/(A)
STRONTIUM 89:M1/(A)STRONTIUM 90:M2/(B)AIR/(B)CHEMICAL ANALYSIS/(B)DIFFUSION:04/(B)ENVIRONMENT/(B)FUNCTIONAL MODELS
/(B)GASEOUS WASTES/(B)IODINE:M4/(B)NUCLEAR FACILITIES/(B)PHOTOMETRY/

12/2/0000001-0000100// 77
32F0021538 NSA-32-06 77.900
(DUN--3898)B REACTOR DEACTIVATION ENGINEERING REPORT/
BRINKMAN,L.E/
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
29 FEB 1968/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
DECONTAMINATION:01/HANFORD PRODUCTION REACTORS:M1/PLANNING/REACTOR SHUTDOWN/RECOMMENDATIONS/

32 ID NSA-32-08 77.700
(DUN--7536)RADIOLOGICAL STATUS REPORT.DEACTIVATION OF THE 105-KE REACTOR PLANT/
WESTOVER,W.G./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
30 APR 1971/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
BUILDINGS/DECONTAMINATION:01/HANFORD PRODUCTION REACTORS:M1/RADIATION HAZARDS/RADIATION MONITORING/

12/2/0000001-0000100// 79
32R0021549 NSA-32-08 77.700
(DUN--7630)RADIOLOGICAL STATUS REPORT DEACTIVATION OF THE 105-KW REACTOR PLANT/
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
26 APR 1971/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
BUILDINGS/DECONTAMINATION:01/HANFORD PRODUCTION REACTORS:M1/RADIATION HAZARDS/

12/2/0000001-0000100// 80
32R0021546 NSA-32-08 77.700
(DUN--7593)RADIOLOGICAL STATUS REPORT DEACTIVATION OF THE 105-B REACTOR PLANT/
WESTOVER,W.G./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
12 APR 1971/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
BUILDINGS/DECONTAMINATION/HANFORD PRODUCTION REACTORS:M1/RADIATION MONITORING:01/

12/2/0000001-0000100// 81
32R0021547 NSA-32-08 77.700
(DUN--6664)K THROUGH REACTOR DECONTAMINATION ENGINEERING REPORT/
BRINKMAN,L.B./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
21 JAN 1970/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
DECONTAMINATION:01/HANFORD PRODUCTION REACTORS:M1/PLANNING/REACTOR COOLING SYSTEMS/

12/2/0000001-0000100// 82
32R0021546 NSA-32-08 77.700
(DUN--3062)RADIOLOGICAL STATUS REPORT DEACTIVATION STATUS:D PLANT/
TATUM,W.J./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
6 OCT 1967/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
DECONTAMINATION:01/HANFORD PRODUCTION REACTORS:M1/RADIATION MONITORING/REACTOR SHUTDOWN/

12/2/0000001-0000100// 83
32R0021512 NSA-32-08 77.500
(WARD-NA--3045-25)STABILITY OF EXTRANEOUS ARTIFACTS IN LIQUID SODIUM/
MEACHAM,S.A./WHITLOW,S.A./
WESTINGHOUSE ELECTRIC CORP.,MADISON,PA.(USA).ADVANCED REACTORS DIV./

CONSTRUCTION MATERIALS IN LMFBR SODIUM SYSTEM/
1975/AT/
IC=5 916 000/
US/
US/
ASBESTOS: M / CHEMICAL PROPERTIES / CLEANING: 02/COTTON:M/GRAPHITE:M/HIGH TEMPERATURE/LMFBR TYPE REACTORS:M1/PHYSICAL PROPERTIES/PLASTICS:M/REACTOR COOLING SYSTEMS:M2;01/REACTOR VESSELS/SODIUM:M7THERMAL DEGRADATION/WOOD:M/

12/2/0000001-0000100// 84
32R0021505 NSA-32-08 77.500
(HEDL-TME--75-51) EXPOSURE OF PRECRACKED AND PRELOADED FRACTURE MECHANICS SPECIMENS IN LIQUID SODIUM WITH AN INTERMEDIATE MOIST NITROGEN CLEANING/
JAMES,L.A./BORISCH,R.R./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
MAY 1975/DEP.NTIS $4.00./
IC=2 906 600/
US/
US/
CHEMICAL REACTIONS/CLEANING/CRACKS:02/LMFBR TYPE REACTORS:M1/MECHANICAL TESTS/NITROGEN/REACTOR COMPONENTS:M2,01/SODIUM /STAINLESS STEEL-304/STRESSES/

12/2/0000001-0000100// 85
32J0019418 NSA-32-08 40.450
SEPARATION OF ANTIMONY-125 IN FISSION PRODUCTS/
AKATSU,E./TOMIZAWA,T./ARATONO,Y.(JAPAN ATOMIC ENERGY RESEARCH INST.,TOKAI,IBARAKI.TOKAI RESEARCH ESTABLISHMENT)/
J.NUCL.SCI.TECHNOL.(TOKYO)/11/12/DEC 1974/571-574/
JA/
JA/
(JNSTA)
79.300/
ADSORPTION / ANTIMONY 125: M1 / CHROMATOGRAPHY:01/DECONTAMINATION/DISTRIBUTION FUNCTIONS/EFFICIENCY/FISSION PRODUCTS/ HYDROBROMIC ACID/NITRIC ACID/SILICA GEL/SPENT FUELS/SULFURIC ACID/

12/2/0000001-0000100// 86
32F0018940 NSA-32-07 77.800
(RN-S--0012)RADIOACTIVE MATERIALS COMPLEX DESIGN DATA AND STUDIES/
AEROJET-GENERAL CORP.,AZUSA,CALIF.(USA)/
NERVA/
FEB 1964/DEP.NTIS $4.75./
IC=D 036 000/
US/
US/
52.200/
DECONTAMINATION / DESIGN: 02 / FEASIBILITY STUDIES/NERVA REACTOR:M1/RADIOACTIVE MATERIALS/RADIOACTIVE WASTE DISPOSAL/ RADIOACTIVE WASTE FACILITIES:M2;01/RADIOACTIVE WASTE STORAGE/SPENT FUEL STORAGE/

12/2/0000001-0000100// 87
32F0018903 NSA-32-07 77.800
(AGC--2584)OPERATIONAL REQUIREMENTS FOR RADIOACTIVE MATERIALS HANDLING,DECONTAMINATION,AND STORAGE COMPLEX AT NRDS/
AEROJET-GENERAL CORP.,AZUSA,CALIF.(USA)/
NERVA/
JUN 1963/DEP.NTIS $8.00./
IC=D 036 000/
US/
US/
52.200/
DECONTAMINATION /NERVA REACTOR:M1/RADIOACTIVE MATERIALS/RADIOACTIVE WASTE DISPOSAL/RADIOACTIVE WASTE FACILITIES:M2,01/ RADIOACTIVE WASTE STORAGE/SPECIFICATIONS:02/SPENT FUEL STORAGE/

32P0017[illegible] NSA-32-07 77.200
MONITORING TECHNIQUES FOR RADIOACTIVE SODIUM AND FISSION PRO[illegible] IN L4FBR/
[illegible]DA,Y./NARITOMI,M./MURATA,M.(JAPAN ATOMIC ENERGY RESEARCH INST.,TOKAI,IBARAKI.TOKAI RESEARCH ESTABLISHMENT)/
NIPPON GENSHIRYOKU GAKKAISHI/16/9/SEP 1974/478-485/(IN JAPANESE)
JA/
JA/
(NSESA)
AERIAL MONITORING / AEROSOL MONITORING:01,02/CONTAMINATION/CORROSION PRODUCTS/FISSION PRODUCTS/IODINE 131/LEAKS/L4FBR
TYPE REACTORS:M1/PRIMARY COOLANT CIRCUITS/RADIOACTIVE AEROSOLS:M2/SODIUM COOLED REACTORS/SODIUM 24/

12/2/0000001-0000100// 89
32R0018824 NSA-32-07 77.200
INP--20532(CHEMICAL,BIOLOGICAL,AND CORROSION INVESTIGATIONS RELATED TO THE TESTING OF THE DIABLO CANYON UNIT 1 COOLING
WATER SYSTEM/
MARRICK,J.W./SHARP,S.G./FRIEDRICH,S.J./
PACIFIC GAS AND ELECTRIC CO.,SAN FRANCISCO,CALIF.(USA).DEPT.OF ENGINEEERING RESEACH/
1975/PACIFIC GAS AND ELECTRIC CO.,SAN FRANCISCO,CA./
IC=9 501 157/
US/
US/
AQUATIC ORGANISMS/CHEMICAL EFFLUENTS/CONDENSERS/COPPER/CORROSION PRODUCTS/DIABLO CANYON-1 REACTOR:M1/REACTOR COOLING
SYSTEMS:01/TESTING/

12/2/0000001-0000100// 90
32S0017461 NSA-32-07 48.510
(JAERI-M--5866)HEALTH PHYSICS AND SAFETY IN JAERI,NO.16.(APRIL 1,1973--MARCH 31,1974)/
JAPAN ATOMIC ENERGY RESEARCH INST.,TOKYO/
JAPAN/
NOV 1974/(IN JAPANESE)INIS/
IC=3 413 COD/
JA/
JA/
48.610/52.200/77.900/
DECONTAMINATION/ENVIRONMENT/JAPAN/NUCLEAR FACILITIES:M2/PERSONNEL DOSIMETRY/PERSONNEL MONITORING/RADIATION PROTECTION:
M1,02/REACTOR SAFETY/RESEARCH PROGRAMS:01/WASTE MANAGEMENT/

12/2/0000001-0000100// 91
32J0016942 NSA-32-07 40.430
THE MANAGEMENT OF RADIOACTIVE WASTES IN NUCLEAR POWER GENERATION/
KIMURA,T.(ELECTRIC POWER DEVELOPMENT CO.LTD.,TOKYO (JAPAN))/
DENGEN KAIHATSU K.K.;CHOSA SHIRYO/52/MAR 1974/119-146/(IN JAPANESE)
JA/
JA/
(DKKKA)
52.200/79.300/
CONTAMINATION / DECONTAMINATION / ENVIRONMENT /FUEL REPROCESSING PLANTS:M2/GASEOUS WASTES/JAPAN/KRYPTON/LIQUID WASTES/
NUCLEAR POWER PLANTS:M1/RADIOACTIVE WASTE DISPOSAL:01,02/RADIOACTIVE WASTE MANAGEMENT:M/RADIOACTIVE WASTE PROCESSING:01,
02/RADIOACTIVE WASTES/SOLID WASTES/SOLIDIFICATION/

12/2/0000001-0000100// 92
32P0016521 NSA-32-06 79.200
PROCESS FOR WITHDRAWING RADIOACTIVE GASES FROM A NUCLEAR REACTOR/
FRUNERMAN,R./BROWN,W.W./
TO WESTINGHOUSE ELECTRIC CORP.,PITTSBURGH,PA.(USA)/
PATENT/
FRENCH PATENT 2,209,177/A//
16 OCT 1973/(IN FRENCH)
US/

/
CONTAMINATION:01/OFF-GAS SYSTEMS:M/PRIMARY COOLANT CIRCUITS/

12/2/0000001-0000100// 93
32J0015590 NSA-32-06 77.900
APPLICATION OF EVAPORATION TO THE TREATMENT OF LIQUIDS IN THE NUCLEAR INDUSTRY/
GOOBEE,H.W./KIBBEY,A.H./
NUCL.SAF./16/4/1975/458-469/
US/
US/
(NUSAR)
40.430/
DECONTAMINATION / EFFICIENCY / EVAPORATION:02 / EVAPORATORS / LIQUID WASTES/NUCLEAR POWER PLANTS:M1/RADIOACTIVE WASTE PROCESSING:M2,01/RADIOACTIVE WASTES/

12/2/0000001-0000100// 94
32F0016302 NSA-32-06 77.600
(CEAP--3289)BWL DECONTAMINATION/
STEGEL,S./
GENERAL ELECTRIC CO.,PLEASANTON,CALIF.(USA).VALLECITOS ATOMIC LAB./
11 NOV 1959/GENERAL ELECTRIC CO.,SAN JOSE,CA./
IC-2 661 000/
US/
US/
40.420/
DECONTAMINATION:02/GETR REACTOR:M1/IN PILE LOOPS:M2,01/RADIATION DOSES/STAINLESS STEELS/

12/2/0000001-0000100// 95
32F0015279 NSA-32-06 77.500
EXTRACTION METHOD FOR THE FISSION PRODUCTS OF A NUCLEAR REACTOR COOLANT/
COOPER,N.M./
TO WESTINGHOUSE ELECTRIC CORP.,PITTSBURGH,PA.(USA)/
LMFBR/PATENT/
FRENCH PATENT 2,209,176/A//
27 SEP 1973/(IN FRENCH)
US/
FR/
40.140/
COLD TRAPS:03 / DECONTAMINATION:02/FISSION PRODUCTS:M3/LMFBR TYPE REACTORS:M1/PRIMARY COOLANT CIRCUITS:01,M2/SOLVENT EXTRACTION/

12/2/0000001-0000100// 96
32C0016225 NSA-32-06 77.200
RADIOACTIVE CONTAMINATION IN PWR PRIMARY CIRCUITS/
FREJAVILLE, G. (CEA CENTRE D'ETUDES NUCLEAIRES DE FONTENAY-AUX-ROSES (FRANCE).DEPT.DE PHYSIQUE DES REACTEURS ET MATHEMATIQUES APPLIQUEES) / BESLU, P. (CEA CENTRE D'ETUDES NUCLEAIRES DE SACLAY,91 - GIF-SUR-YVETTE (FRANCE).DEPT.DE PHYSIQUE DES REACTEURS ET DE MATHEMATIQUES APPLIQUEES)/MARCHAL,A.(SOCIETE D'ENERGIE NUCLEAIRE FRANCO-BELGE DES ARDENNES, 08 - CHOOZ-LEZ-GIVET (FRANCE))/SAMUEL,T.(NORDDEUTSCHWEIZERISCHE KRAFTWERKE A.G.,DOETTINGEN.KERNKRAFTWERK BEZNAU)/
SOCIETE FRANCAISE DE L'ENERGIE NUCLEAIRE/CLAMART,FRANCE/1975/(IN FRENCH)
LA MATURITE DE L'ENERGIE NUCLEAIRE/
LEMOULIER,J./MANTEGA,M.(EDS.)/
FR/
FR/
I.EUROPEAN NUCLEAR CONFERENCE/
PARIS,FRANCE/
21 APR 1975/
ARDENNES REACTOR/BEZNAU-1 REACTOR/BEZNAU-2 REACTOR/CONTAMINATION:02/CORROSION PRODUCTS/PRIMARY COOLANT CIRCUITS:01,M2/PWR TYPE REACTORS:M1/RADIONUCLIDE MIGRATION/

1016202 NSA-32-06 77.100
PROBLEMS CONNECTED WITH WATER CHEMISTRY IN THE PRIMARY CIRCUIT OF LIGHT-WATER REACTORS/
DELLE, L. / ROZENBERG, J. / DARRAS, R. (CEA CENTRE D'ETUDES NUCLEAIRES DE SACLAY,91 - GIF-SUR-YVETTE (FRANCE).DEPT.DE RECHERCHE ET ANALYSE)/
SOCIETE FRANCAISE DE L'ENERGIE NUCLEAIRE/CLAMART,FRANCE/1975/(IN FRENCH)
LA MATURITE DE L'ENERGIE NUCLEAIRE/
LEMOULIER,J./MANTEGA,R.(EDS.)/
FR/
FR/
1.EUROPEAN NUCLEAR CONFERENCE/
PARIS,FRANCE/
21 APR 1975/
77.200/
BWR TYPE REACTORS: 42 / CORROSION PRODUCTS/DECONTAMINATION/FILTRATION/PRIMARY COOLANT CIRCUITS/PURIFICATION/PWR TYPE REACTORS:M1/RADIOLYSIS/TRITIUM/WATER/WATER CHEMISTRY:01,02/

12/2/0000001-0000100// 98
32F0013925 NSA-32-06 40.450
(PES/S--3.30(6-75))SELECTION,APPLICATION,AND INSPECTION OF PROTECTIVE COATINGS (PAINTS)FOR FUEL REPROCESSING PLANTS/
NUCLEAR REGULATORY COMMISSION,WASHINGTON,D.C.(USA).OFFICE OF STANDARDS DEVELOPMENT/
JUN 1975/NRC/
IC=9 500 983/
US/
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79.300/
DECONTAMINATION/FUEL REPROCESSING PLANTS:M1/MAINTENANCE/PAINTS:M2/PROTECTIVE COATINGS:01/REGULATORY GUIDES:02/

12/2/0000001-0000100// 99
92C0013272 NSA-32-05 77.700
(UNI-SA--111)DECONTAMINATION EXPERIENCE AT THE HANFORD N REACTOR/
KRATZER,W.K./LARRICK,A.P./CORBIT,C.D./
UNITED NUCLEAR INDUSTRIES,INC.,RICHLAND,WASH.(USA)/
15 APR 1975/
CONF-750537--1/DEP.NTIS $4.00./
IC=9 500 320/
US/
US/
SEMINAR ON DECONTAMINATION OF NUCLEAR PLANTS/
COLUMBUS,OHIO,USA/
7 MAY 1975/
40.420/
DECONTAMINATION/N-REACTOR:M1/REACTOR COMPONENTS:01/REACTOR COOLING SYSTEMS/STEAM GENERATORS/

12/2/0000001-0000100// 100
92C0013184 NSA-32-05 77.500
(KFK-EXT--6/75-1)THE CORROSION PROBLEMS IN FAST SODIUM COOLED REACTORS/
BORGSTEDT,H.U./
KERNFORSCHUNGSZENTRUM KARLSRUHE (F.R.GERMANY).INST.FUER MATERIAL- UND FESTKOERPERFORSCHUNG/
FEB 1975/
AED-CONF--74-706-001/INIS/
IC=3 586 000/
GE/
GE/
5.SESSION OF THE ARBEITSGRUPPE "KORROSION IN DER KERNENERGIE"/
KARLSRUHE,FGR:GERMANY/
15 OCT 1974/
50.210/
CARBON / CORROSION: G1 / CORROSION PRODUCTS / FERRITE /FUEL CANS/HEAT TRANSFER/INTERSTITIALS/LIQUID METALS/LMFBR TYPE

ACTORS: M2 /MASS TRANSFER/NUCLEAR REACTIONS/QUANTITY RATIO DISOTOPES/REACTOR COMPONENTS:M1,02/SODIUM/SODIUM COOLED
REACTORS/STAINLESS STEELS/STEAM GENERATORS/SUPERHEATERS/TEMPERATURE DEPENDENCE/TUBES/

12/2/0000001-0000100// 1
33J0032529 NSA-33-12 77.200
METHOD FOR THE DECONTAMINATION OF THE COOLANT N/SUB 2/O/SUB 4/FROM RADIOIODINE/
DRUGACHENOK,M.A./GOL'TSEV,V.P./DATSKEVICH,P.I./KUZNETSOVA,N.B./DOLGOV,V.M./
INST.OF NUCLEAR ENERGY,MINSK/
PURIFICATION OF PRIMARY COOLANT/
VESTSI AKAD.NAVUK BSSR,SER.FIZ.-ENERG.NAVUK/4/1975/37-39/(IN RUSSIAN)
EY/
BY/
(VAFEA)
40.430/
ADSORPTION: Q1 / COOLANTS:Q2/DECONTAMINATION:Q3/DISSOCIATING GASES/GAS COOLED REACTORS:M2/GASES/IODINE 131:M1/NITROGEN
OXIDES:M3/SILICA GEL/SILVER NITRATES/

12/2/0000001-0000100// 2
33E0032522 NSA-33-12 77.200
ACCUMULATION OF RADIOACTIVE CORROSION PRODUCTS IN NUCLEAR STEAM GENERATORS/
LISTER,D.H./
ATOMIC ENERGY OF CANADA LTD./CHALK RIVER,ONT./1976/$1.50/
CA/
CA/
CORROSION PRODUCTS:M3,Q2/DATA/MATHEMATICAL MODELS:Q3/NUCLEAR POWER PLANTS:M1/STEAM GENERATORS:M2,Q1/

12/2/0000001-0000100// 3
33X0032273 NSA-33-12 77.500
(AI-ERDA--13154) SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS;ANNUAL TECHNICAL PROGRESS REPORT,GOVERNMENT
FISCAL YEAR 1975/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
15 AUG 1975/AT/
IC-9 500 331/
US/
US/
77.800/
BEARINGS: M6 / CLEANING: Q7 / CLINCH RIVER BREEDER REACTOR:M2/COATINGS/CORROSIVE EFFECTS:Q8/COVER GAS/FFTF REACTOR:M3/
FRICTION: Q6 / LMFBR TYPE REACTORS:M1 /PERFORMANCE TESTING:Q5/PHYSICAL PROPERTIES/REACTOR COMPONENTS:M7,Q2,Q3/REACTOR
COOLING SYSTEMS:M4,Q1/REACTOR MATERIALS:M/REMOTE HANDLING EQUIPMENT/REMOVAL:Q8/RESEARCH PROGRAMS/SEALS:M5,Q4/SODIUM:M8/
STAINLESS STEELS/

12/2/0000001-0000100// 4
33Y0032234 NSA-33-12 77.200
INSPECTION AND REPAIRS OF REACTOR COMPONENTS/
SNTL - NAKLADATELSTVI TECHNICKE LITERATURY/PRAGUE/1974/(IN CZECH)
OPERATION OF NOVO-VORONEZH NUCLEAR POWER PLANT REACTORS/
CS/
CS/
DECONTAMINATION / INSPECTION /PRIMARY COOLANT CIRCUITS/REACTOR MAINTENANCE:Q1,Q2,Q3,Q4/REPAIR/WATER/WWER-1 REACTOR:M1/
WWER-2 REACTOR:M2/WWER-3 REACTOR:M3/WWER-4 REACTOR:M4/

12/2/0000001-0000100// 5
33Y0032231 NSA-33-12 77.200
NUCLEAR POWER PLANT FLOW CHARTS/
SNTL - NAKLADATELSTVI TECHNICKE LITERATURY/PRAGUE/1974/(IN CZECH)
OPERATION OF NOVO-VORONEZH NUCLEAR POWER PLANT REACTORS/
CS/

DECONTAMINATION / FILTERS / FILTRATION /FLOWSHEETS/GASEOUS [illegible] S/ION EXCHANGE MATERIALS/LIQUID WASTES/PRIMARY COOLANT CIRCUITS /PURIFICATION/RADIOACTIVE WASTES/REACTOR COOLING SYSTEMS:01,02,03,04/SECONDARY COOLANT CIRCUITS/SPECIFICATIONS/ VENTILATION/WATER/WWER-1 REACTOR:M1/WWER-2 REACTOR:M2/WWER-3 REACTOR:M3/WWER-4 REACTOR:M4/

12/2/0000001-0000100// 6
33Y0032230 NSA-33-12 77.200
SPECIAL EQUIPMENT OF WATER PURIFYING CIRCUITS/
SNTL - NAKLADATELSTVI TECHNICKE LITERATURY/PRAGUE/1974/(IN CZECH)
OPERATION OF NOVO VORONEZH NUCLEAR POWER PLANT REACTORS/
CS/
CS/
DECONTAMINATION/DISTILLATION/EVAPORATION/EVAPORATORS/FEEDWATER/FILTERS/FILTRATION/ION EXCHANGE MATERIALS/NUCLEAR POWER PLANTS/PRIMARY COOLANT CIRCUITS/PURIFICATION/SPECIFICATIONS/WATER CHEMISTRY:01/WWER TYPE REACTORS:M1/

12/2/0000001-0000100// 7
33C0032205 NSA-33-12 77.200
(CEA-CONF--3141)SOLUBILIZATION OF DEPOSITS IN REACTOR CIRCUITS/
BESLU,P./FREJAVILLE,G./LALET,A./MICAUX,B./
CEA CENTRE D'ETUDES NUCLEAIRES DE SACLAY, 91 - GIF-SUR-YVETTE (FRANCE) . DEPT. DE PHYSIQUE DES REACTEURS ET DE MATHEMATIQUES APPLIQUEES/
PWR/
JUN 1975/(IN FRENCH)INIS/
IC=1 404 400/
FR/
FR/
SEMINAR ON DECONTAMINATION OF NUCLEAR PLANTS/
COLUMBUS,USA/
7 MAY 1975/
CORROSION PRODUCTS/DECONTAMINATION/DEPOSITS:01/DISSOLUTION/P CODES/PRIMARY COOLANT CIRCUITS:M1,02/PWR TYPE REACTORS:M2

12/2/0000001-0000100// 8
33J0032200 NSA-33-12 77.100
TRANSPORT OF RADIOACTIVE CORROSION PRODUCTS IN HIGH-TEMPERATURE WATER:II:THE ACTIVATION OF ISOTHERMAL STEEL SURFACES/
LISTER,D.H./
CHALK RIVER NUCLEAR LABS.,ONT./
NUCL.SCI.ENG./59/4/APR 1976/406-426/
CA/
US/
(INSEMA)
77.200/
SWR TYPE REACTORS:M1/CHEMICAL REACTION KINETICS/COBALT 60/COMPARATIVE EVALUATIONS/CORROSION/CORROSION PRODUCTS:04,05/ DATA /DIFFUSION:04/DISTRIBUTION/MATHEMATICAL MODELS/PWR TYPE REACTORS:M2/REACTOR COOLING SYSTEMS:M3,01,02/SURFACES/WATER COOLED REACTORS/

12/2/0000001-0000100// 9
33P0028050 NSA-33-11 77.500
METHOD OF REMOVING BULK SODIUM FROM METALLIC SURFACES/
MAFFEI,H.P./BORISCH,R.R./
TO U.S.ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION/
PATENT/
US PATENT 3,918,961/
FILED DATE 12 DEC 1974/
11 NOV 1975/
US/
US/
CLEANING:02/REACTOR COMPONENTS:M2,01/SODIUM/SODIUM COOLED REACTORS:M1/STAINLESS STEELS/TEMPERATURE CONTROL/WATER VAPOR

12/2/0000001-0000100// 10
33C0028025 NSA-33-11 77.500
(IAEA--169(VOL.3))PHYSICAL PECULIARITIES OF THE FAST POWER REACTOR FUEL CYCLE/
ORLOV,V.V./BAKUMENKO,D.D./IKHLOV,E.M./KULAKOVSKIJ,M.YA./TROYANOV,M.F./TSYKUNOV,A.G./
INTERNATIONAL ATOMIC ENERGY AGENCY,VIENNA (AUSTRIA)/
1974/INIS/
FISSION PRODUCT NUCLEAR DATA (FPND):PROCEEDINGS OF A PANEL ORGANIZED BY THE IAEA AND HELD IN BOLOGNA,26-30 NOVEMBER
1973/
IC=3 294 000/
AT/
XA/
PANEL ON FISSION PRODUCT NUCLEAR DATA/
BOLOGNA,ITALY/
26 NOV 1973/
DECONTAMINATION / FAST REACTORS/FISSION PRODUCTS/FUEL CYCLE:01/ISOTOPE RATIO:02/LMFBR TYPE REACTORS:M17NUCLEAR FUELS/
POWER REACTORS/RADIOACTIVITY/SPENT FUEL ELEMENTS:M2,01/TRANSPORT/

12/2/0000001-0000100// 11
33R0028024 NSA-33-11 77.500
(HEDL-TC--3271)WATER VAPOR NITROGEN PROCESS FOR SODIUM REMOVAL/
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
AUG 1975/AT/
IC=2 906 800/
US/
US/
CLEANING:02/LMFBR TYPE REACTORS:M1/NITROGEN/REACTOR COMPONENTS:M2,01/REMOVAL:03/SODIUM:M3/STRESS CORROSION/WATER VAPOR

12/2/0000001-0000100// 12
33C0025270 NSA-33-10 77.900
DECONTAMINATION OF DRESDEN UNIT 1/
KIEDAISCH,W.I./
COMMONWEALTH EDISON CO.,CHICAGO/
PROC.AM.POWER CONF./37/1975/267-270/
US/
US/
(PAPWA)
ANNUAL AMERICAN POWER CONFERENCE/
CHICAGO,ILLINOIS,USA/
21 APR 1975/
77.100/
DECONTAMINATION: 01/DEPOSITS/DRESDEN-1 REACTOR:M1/RADIATION DOSES/RADIATION PROTECTION/REACTOR COOLING SYSTEMS/SURFACE
CLEANING/SURFACES/

12/2/0000001-0000100// 13
33A0025179 NSA-33-10 77.500
(HEDL-TME--75-64)SODIUM TECHNOLOGY TECHNICAL PROGRESS REPORT,APRIL,MAY,JUNE 1975/
ATKOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
LMFBR/
DEC 1975/DEP.NTIS $7.50/
IC=2 906 800/
US/
US/
77.600/
CLEANING: 04 / CLINCH RIVER BREEDER REACTOR: M3 / CORROSION: 04/CORROSION PRODUCTS/CORROSIVE EFFECTS/FAILED ELEMENT

[illegible] REACTOR:[illegible]/FISSION PRODUCTS/LMFBR T[illegible] REACTORS:M1/REACTOR COMPONENT[illegible]/RINGVALIDS/
[illegible]/

12/[illegible]000001-0000100// 14
33[illegible]5158 NSA-33-10 77.400
[illegible]-4444)PROPERTIES OF DOUGLAS POINT GENERATING STATION HEAT TRANSPORT CORROSION PRODUCTS/
[illegible]ORD,B./RUMMERY,T.E./
[illegible] C ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT/
[illegible]975/DEP.NT'S US SALES ONLY$4.00./
[illegible]653 000/
CA[illegible]
C[illegible]
CARBON STEELS/CORROSION PRODUCTS/DEPOSITS/DOUGLAS POINT ONTARIO REACTOR:M1/FILTERS/MONEL/PRIMARY COOLANT CIRCUITS:01/

12/[illegible]000001-0000100// 15
33J0025155 NSA-33-10 77.300
THE NUCLEAR POWER STATION PROJECT UTILISING A HIGH-TEMPERATURE REACTOR WITH A DIRECT-CYCLE GAS TURBINE (HHT)/
SARLOS, G. / MARKOCZY, G./ZOLLINGER,E./DUPONT,J.F./SCHENKER,E./HASCHKE,D.(EIDGENOESSISCHES INST.FUER REAKTORFORSCHUNG,
WUERENLINGEN (SWITZERLAND))/
NEUE TECH./16/11/NOV 1974/449-456/(IN FRENCH)
CH/
CH/
(NETEA)
COMPRESSORS / COOLING TOWERS /DECONTAMINATION/DIRECT CYCLE COOLING SYSTEMS:01/GAMMA RADIATION/GAS COOLED REACTORS/GAS
TURBINES/GERMAN FEDERAL REPUBLIC/HEAT EXCHANGERS/HTGR TYPE REACTORS:M1/NEUTRON FLUX/NUCLEAR POWER PLANTS/SPECIFICATIONS/
SWITZERLAND/

12/2/0000001-0000100// 16
33C0025146 NSA-33-10 77.300
PREOPERATIONAL CHEMICAL CLEANING OF FORT ST.VRAIN NUCLEAR GENERATING STATION SYSTEMS/
TATUM,C.B.(EBASCO SERVICE INC.,NEW YORK)/SCHUETZENDUEBEL,W.G./RIEBE,J.J./EISENHOFER,J.J./
PROC.AM.POWER CONF./37/1975/772-780/
US/
US/
(PAPWA)
ANNUAL AMERICAN POWER CONFERENCE/
CHICAGO,ILLINOIS,USA/
21 APR 1975/
DEPOSITS/REMOVAL/SECONDARY COOLANT CIRCUITS:01/SURFACE CLEANING/VRAIN REACTOR:M1/

12/2/0000001-0000100// 17
33C0025112 NSA-33-10 77.100
DEVELOPING A SOLVENT,PROCESS,EQUIPMENT,AND PROCEDURES FOR DECONTAMINATING THE DRESDEN-1 REACTOR/
HARMER,D.E.(DOW CHEMICAL CO.,MIDLAND,MI)/FRAUSON,F.P.JR./SNYDER,M.A./ANDERS,D.U./HOLLOWAY,J.J./
PROC.AM.POWER CONF./37/1975/282-288/
US/
US/
(PAPWA)
ANNUAL AMERICAN POWER CONFERENCE/
CHICAGO,ILLINOIS,USA/
21 APR 1975/
DECONTAMINATION:01/DRESDEN-1 REACTOR:M1/PERFORMANCE/SOLVENTS/SURFACE CLEANING/

12/2/0000001-0000100// 18
33C0025111 NSA-33-10 77.100
PROTECTING DRESDEN 1 REACTOR COOLANT MATERIALS FROM CORROSION DURING DECONTAMINATION AND AFTER RETURN TO SERVICE/
STAEHLE,R.W./
OHIO STATE UNIV.,COLUMBUS/

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 ICC.AM.POWER CONF./37/1975/271-281/
 S/
 US/
 (PAPWA)
 ANNUAL AMERICAN POWER CONFERENCE/
 CHICAGO,ILLINOIS,USA/
 21 APR 1975/
 CORROSION PROTECTION/DECONTAMINATION/DRESDEN-1 REACTOR:M1/REACTOR COOLING SYSTEMS:Q1/SURFACE CLEANING/

12/2/0000001-0000100//      19
33C0022522 NSA-33-09  79.200
 (EUR--5395(VOL.1))MANUFACTURING HIGH TEMPERATURE THERMOCOUPLES/
 COVILLE,P./
 COMMISSION  OF  THE  EUROPEAN  COMMUNITIES, PETTEN  (NETHERLANDS) .JOINT NUCLEAR RESEARCH CENTER/UKAEA RESEARCH GROUP,
HARWELL.ATOMIC ENERGY RESEARCH ESTABLISHMENT/
 SODERN,SA,SURESNES,FRANCE/
 1975/
 CONF-741226--P1/
 INTERNATIONAL COLLOQUIUM ON HIGH-TEMPERATURE IN-PILE THERMOMETRY/
 VON DER HARDT,P./ZEISSER,P./MASON,F.(EDS.)/
 IC=1 910 950/6 408 000/
 FF/
 XE/
 INTERNATIONAL COLLOQUIUM ON HIGH TEMPERATURE IN-PILE THERMOMETRY/
 PETTEN,NETHERLANDS/
 12 DEC 1974/
 46.400/
 CLEANING/FABRICATION:Q1/IN CORE INSTRUMENTS/RHENIUM/TEMPERATURE MEASUREMENT/THERMOCOUPLES:M1/TUNGSTEN/WELDING/

12/2/0000001-0000100//      20
33C0022338 NSA-33-09  77.900
 PLANNING A NUCLEAR PLANT PRIMARY SYSTEM DECONTAMINATION/
 KIEDAISCH,W.I./
 COMMONWEALTH EDISON CO.,CHICAGO/
 TRANS.AM.NUCL.SOC./22/NOV 1975/120-121/
 US/
 US/
 (TANSA)
 AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
 SAN FRANCISCO,CA,USA/
 16 NOV 1975/
 DECONTAMINATION:Q2/DEPOSITS/NUCLEAR POWER PLANTS:M1/PLANNING/PRIMARY COOLANT CIRCUITS:M2,Q1/REMOVAL/

12/2/0000001-0000100//      21
33C0022020 NSA-33-09  77.200
 MEASUREMENT OF FUEL ELEMENT CRUD DEPOSITS IN PRESSURIZED WATER REACTORS/
 SOLOMON,Y./ROESMER,J./
 WESTINGHOUSE ELECTRIC CORP.,PITTSBURGH/
 TRANS.AM.NUCL.SOC./22/NOV 1975/551-552/
 US/
 US/
 (TANSA)
 AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
 SAN FRANCISCO,CA,USA/
 18 NOV 1975/
 CORROSION PRODUCTS:Q1/DEPOSITS/MEASURING METHODS/PWR TYPE REACTORS:M1/REACTOR CORES/SURFACES/WATER CHEMISTRY/
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00022004-NSA-33-09 77.200
PWR RADIATION BUILDUP:THE COURSE AHEAD/
MCCORMICK,D.J./
CONSOLIDATED EDISON OF NEW YORK/
TRANS.AM.NUCL.SOC./22/NOV 1975/120/
US/
US/
(TANSA)
AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
SAN FRANCISCO,CA,USA/
16 NOV 1975/
DECONTAMINATION:02/HEAT EXCHANGERS:M2,01/PWR TYPE REACTORS:M1/RADIATION DOSES/REACTOR MAINTENANCE/REPAIR/

12/2/0000001-0000100// 23
33P0021998 NSA-33-09 77.100
METHOD AND APPARATUS FOR REMOVING RADIOACTIVE GASES FROM A NUCLEAR REACTOR/
FRUMERMAN,R./BROWN,W.W./
TO WESTINGHOUSE ELECTRIC CORP./
PATENT/PWR/
US PATENT 3,910,817/
FILED DATE 17 OCT 1972/
7 OCT 1975/
US/
US/
DECONTAMINATION:02/GASES/PRIMARY COOLANT CIRCUITS:M2,01/PWR TYPE REACTORS:M1/RADIOACTIVE MATERIALS/

12/2/0000001-0000100// 24
33C0021980 NSA-33-09 77.100
CHEMISTRY OF RADIOACTIVE DEPOSITS AND LABORATORY DECONTAMINATION OF SPECIMENS FROM BWR AND PWR NUCLEAR PLANTS/
ANDERS,D.U./
DOW CHEMICAL CO.,MIDLAND,MI/
TRANS.AM.NUCL.SOC./22/NOV 1975/121/
US/
US/
(TANSA)
AMERICAN NUCLEAR SOCIETY 1975 WINTER MEETING/
SAN FRANCISCO,CA,USA/
16 NOV 1975/
77.200/
BWR TYPE REACTORS:M2/CHEMISTRY/DECONTAMINATION:03/DEPOSITS/PRIMARY COOLANT CIRCUITS:M3,01,02/PWR TYPE REACTORS:M1/

12/2/0000001-0000100// 25
33C0019488 NSA-33-08 77.500
STUDY OF MASS TRANSFER BY LIQUID SODIUM IN CLOSED LOOP SYSTEMS.SODIUM TECHNOLOGY DEVELOPMENT PROGRAM/
KOLSTER,B.H./
NIJVERHEIDSORGANISATIE TNO/THE HAGUE/1974/
NL/
NL/
INFORMATION MEETING TNO CONTRIBUTION TO LMFBR DEVELOPMENT/
UTRECHT,NETHERLANDS/
10 MAY 1973/
CARBON / CHROMIUM ADDITIONS / CORROSION: 04 / CORROSION PRODUCTS/DEPOSITION/HIGH TEMPERATURE/LIQUID METALS/LMFBR TYPE REACTORS: M2 / MASS TRANSFER: 01, 03/NIOBIUM ADDITIONS/PRIMARY COOLANT CIRCUITS/REACTOR COOLING SYSTEMS:M3,02/SECONDARY COOLANT CIRCUITS/SODIUM:M1/SODIUM COOLED REACTORS/STAINLESS STEEL-316:M4/STAINLESS STEELS/

12/2/0000001-0000100// 26
33X0016283 NSA-33-07 77.500
(AI-ERDA--13160) SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS.QUARTERLY TECHNICAL PROGRESS REPORT,

SEPTEMBER 1975/
H.F.H./STEELE,O.P.III/HILL,E./
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/
15 NOV 1975/AT/
IC*9 500 331/
US/
US/
BEARINGS:M5/CLEANING:Q3/CLINCH RIVER BREEDER REACTOR:M8/COATINGS:Q4/CORROSIVE EFFECTS:Q7/COVER GAS/DATA/FRICTION:Q4,Q5
/ LMFBR TYPE REACTORS:M1/PERFORMANCE TESTING:Q6/PHYSICAL PROPERTIES/REACTOR COMPONENTS:M3,Q9/REACTOR COOLING SYSTEMS:M2,
Q1 / REACTOR MATERIALS:M4/REMOTE HANDLING EQUIPMENT/REMOVAL:Q7/RESEARCH PROGRAMS/SEALS:M6,Q2/SODIUM:M7/STAINLESS STEELS/
STORAGE:Q3/TRAPS/

12/2/0000001-0000100// 27
33JC016258 NSA-33-07 77.200
SPECIAL FEATURES OF EXTERNAL CORROSION OF FUEL CLADDING IN BOILING WATER REACTORS/
LUNDE,L.(INSTITUTT FOR ATOMENERGI,KJELLER (NORWAY))/
NUCL.ENG.DES./33/2/SEP 1975/178-195/
NO/
NL/
(NEDEA)
BWR TYPE REACTORS:M1/CORROSION PICKLING/CORROSION PRODUCTS/FLUORINE/FRETTING CORROSION:Q2/FUEL CANS:Q1,M2/IMPURITIES/
NITROGEN/OXYGEN/SPACERS/THERMAL CONDUCTIVITY/URANIUM/ZIRCONIUM ALLOYS/

12/2/0000001-0000100// 28
33XC015227 NSA-33-07 50.210
(WARD-NA--3045-26) SODIUM TECHNOLOGY PROGRAM: COMPONENT MATERIALS COMPATIBILITY.QUARTERLY PROGRESS REPORT FOR PERIOD
ENDING APRIL 30,1975/
RAY,W.E./
WESTINGHOUSE ELECTRIC CORP.,MADISON,PA.(USA).ADVANCED REACTORS DIV./
INTERSTITIAL TRANSFER/EFFECTS ON MECHANICAL PROPERTIES/
NOV 1975/AT/
IC*6 916 000/
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US/
77.500/79.200/
ALCOHOLS /CARBON:M2/CARBURIZATION/CHROMIUM-MOLYBDENUM STEELS:M5/CLEANING/COOLANT LOOPS/CORROSION:Q3,Q4,Q5,Q6/CORROSIVE
EFFECTS:Q1/CREEP/FATIGUE/HIGH TEMPERATURE/INCONEL 718:M6/INTERSTITIALS/MASS TRANSFER:Q2/MICROSTRUCTURE/RESEARCH PROGRAMS
/SODIUM:M1/STAINLESS STEEL-304:M4/STAINLESS STEEL-316:M3/

12/2/0000001-0000100// 29
33C0014203 NSA-33-06 79.700
(CONF-750827--) DECOMMISSIONING AND DECONTAMINATION OF LICENSED REACTOR FACILITIES AND DEMONSTRATION NUCLEAR POWER
PLANTS/
LEAR,G./ERICKSON,P.B./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
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IC*9 501 173/0 047 300/
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IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
DECONTAMINATION / LEGAL ASPECTS / NUCLEAR POWER PLANTS: M2/REACTOR DECOMMISSIONING:M3,Q1,Q2/REGULATIONS:Q3/RESEARCH
REACTORS:M1/US NRC/

33C0014082 NSA-33-06 77.900
(CONF-750827--)DECOMMISSIONING PLAN FOR THE HEAVY WATER COMPONENTS TEST REACTOR/
FIELD,F.P./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
E.I.DU PONT DE NEMOURS AND CO.,AIKEN,SC/
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IDAHO FALLS,IDAHO,USA/
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77.600/
ACTIVITY LEVELS/DECONTAMINATION/HWCTR REACTOR:M1/PLANNING/REACTOR DECOMMISSIONING:01/REACTOR SITES/

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33C0014082 NSA-33-06 77.900
(CONF-750827--) PREPARATIONS FOR DECONTAMINATION AND DISPOSITION OF THE SODIUM REACTOR EXPERIMENT (SRE)AND OTHER ERDA
FACILITIES AT A1/
HEINE,W.E./GRAVES,A.W./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
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IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
77.600/
DECONTAMINATION/PLANNING/REACTOR DISMANTLING:01/SRE REACTOR:M1/

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33C0014081 NSA-33-06 77.900
(CONF-750827--)DECONTAMINATION AND DECOMMISSIONING EXPERIENCE AT EXPERIMENTAL BREEDER REACTOR NO.1/
KENDALL,E.W./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
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IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
77.500/40.420/
DECONTAMINATION:01 / EBR-1 REACTOR:M1/LIQUID METALS/POTASSIUM ALLOYS/REACTOR DECOMMISSIONING:01/REACTOR DISMANTLING/
REACTOR SITES/REMOVAL/SODIUM ALLOYS/SURFACE CLEANING/

12/2/0000001-0000100// 33
33C0014080 NSA-33-06 77.900
(CONF-750827--)DECONTAMINATION AND DISPOSITION OF HALLAM AND PIQUA REACTORS/

[illegible]/[illegible]/
[illegible]GY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
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IDAHO FALLS,IDAHO,USA/
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ACTIVITY LEVELS / DECONTAMINATION*01,02/HNPF REACTOR*M1/PNPF REACTOR*M2/RADIOACTIVITY/REACTOR DECOMMISSIONING/REACTOR
DISMANTLING*M,01,02/REACTOR SITES/SHIELDING/

12/2/0000001-0000100// 34
33C0014079 NSA-33-06 77.900
(CONF-750827--)PROGRAM PLAN FOR REMOVAL OF THE MATERIALS TEST REACTOR OVERHEAD WORKING RESERVOIR/
LEWIS,B.C./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
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CONFERENCE ON DECONTAMINATION AND DECOMMISSIONING OF ERDA FACILITIES/
IDAHO FALLS,IDAHO,USA/
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77.500/40.420/
ACTIVITY LEVELS/DECONTAMINATION/MTR REACTOR*M1/NUCLEAR FACILITIES/REACTOR DISMANTLING*01/REMOVAL/TANKS/

12/2/0000001-0000100// 35
33C0014024 NSA-33-06 77.600
(CONF-750827--)PROGRAM PLAN FOR DECONTAMINATION AND DECOMMISSIONING THE MATERIALS TESTING REACTOR AT THE INEL/
JONES,T.F./
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION,IDAHO FALLS,IDAHO (USA).IDAHO OPERATIONS OFFICE/AEROJET NUCLEAR CO.,
IDAHO FALLS,IDAHO (USA)/
AEROJET NUCLEAR CORP.,IDAHO FALLS,ID/
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IDAHO FALLS,IDAHO,USA/
19 AUG 1975/
DECONTAMINATION/MTR REACTOR*M1/PLANNING/REACTOR DECOMMISSIONING/REACTOR DISMANTLING*01/

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33X0013994 NSA-33-06 77.500
(ORNL-TM--5173) FINAL REPORT OF THE LMFBR CAMPAIGN OF THE EXPERIMENTAL ENGINEERING SECTION OFF-GAS DECONTAMINATION
FACILITY,MARCH--JULY 1975/
KLEIN,J.A./GILLIAM,T.M./
OAK RIDGE NATIONAL LAB.,TENN.(USA)/
JAN 1976/AT/

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DECONTAMINATION/EFFICIENCY/KRYPTON/LMFBR TYPE REACTORS:M1/OFF-GAS SYSTEMS:M2.01/PERFORMANCE TESTING:02/

12/2/0000001-0000100// 37
33F0011397 NSA-33-05 77.700
(DOCKET-50259--677)BROWNS FERRY NUCLEAR POWER STATION,UNITS 1,2,AND 3.SEMIANNUAL REPORT,JANUARY--JUNE 1975/
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77.300/
BROWNS FERRY-1 REACTOR:M1/BROWNS FERRY-2 REACTOR:M2/BROWNS FERRY-3 REACTOR/CLEANING/DECONTAMINATION/ENVIRONMENT/FIRES:
M, 01, 02 / MONITORING/PERSONNEL/RADIATION DOSES/RADIOACTIVE WASTE MANAGEMENT/RADIOCHEMISTRY/REACTOR MAINTENANCE/REACTOR
OPERATION:01,02/

12/2/0000001-0000100// 38
33C0011329 NSA-33-05 77.900
(ANS-SD--15)MINIMIZING RADIATION EXPOSURES IN PWR PLANTS/
CLEMONS,L.JR.(WESTINGHOUSE ELECTRIC CORP.,MONROEVILLE,PA)/BATTAGLIA,J.A./
AMERICAN NUCLEAR SOCIETY,OAK RIDGE,TENN./
NOV 1975/
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LOUISIANA,JUNE 8--13,1975/
IC=0 282 000/
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NEW ORLEANS,LOUISIANA,USA/
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77.200/
DECONTAMINATION / DESIGN / NUCLEAR POWER PLANTS:M2/PERSONNEL:M3/PWR TYPE REACTORS:M1/RADIATION PROTECTION:03/REACTOR
MAINTENANCE:01,02/SHIELDING/

12/2/0000001-0000100// 39
33A0009774 NSA-33-05 50.210
(AECL--5227)MATERIALS RESEARCH IN AECL/
ATOMIC ENERGY OF CANADA LTD.,CHALK RIVER,ONTARIO.CHALK RIVER NUCLEAR LABS./
TRANSPORT OF RADIOACTIVATED CORROSION PRODUCTS IN REACTORS/
SUM 1975/DEP.NTIS (US SALES ONLY)$4.50.AECL $1.00./
IC=0 643 000/
CA/
CA/
77.900/
BOILERS / COBALT 60:M4/CONTAMINATION:02,03/COPPER/CORROSION PRODUCTS:M1/DECONTAMINATION:03/DEPOSITION:04/DISSOLUTION/
DOUGLAS POINT ONTARIO REACTOR: M3 / ELECTROCHEMISTRY / FILTERS /ION EXCHANGE MATERIALS/MATHEMATICAL MODELS/OXIDATION/
RADIOACTIVATION:01/REACTOR COOLING SYSTEMS:M2/REACTOR MATERIALS/RESEARCH PROGRAMS/

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33C0008691 NSA-33-04 77.300
(AED-CONF--75-233-003)RELEASE AND DEPOSITION OF FISSION PRODUCTS/
NIELKEN,G./
KERNFORSCHUNGSANLAGE JUELICH G.M.B.H.(F.R.GERMANY)/PROJEKT HOCHTEMPERATURREAKTOR MIT HELIUMTURBINEN/
HTGR/

75/IN GERMANIUMIS/
*9 200 109/
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DE/
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JUELICH,F.R.GERMANY/
2 JUN 1975/
CESIUM 134/CESIUM 137/COATED FUEL PARTICLES:M1/DECONTAMINATION/DEPOSITION/FISSION FRAGMENTS/FISSION PRODUCT RELEASE:Q1
/ GRAPHITE / HTGR TYPE REACTORS:M2/IODINE 131/KRYPTON 88/RADIONUCLIDE KINETICS:Q3/RADIONUCLIDE MIGRATION/REACTOR COOLING
SYSTEMS:M3,Q2/SILVER 110/STRONTIUM 90/TELLURIUM 129/XENON 133/

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33C0007387 NSA-33-04 50.300
(CONF-751121--1)TESTING OF COATINGS FOR THE NUCLEAR INDUSTRY/
GOLDBERG,G./
OAK RIDGE NATIONAL LAB.,TENN.(USA)/
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IC=4 832 000/
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BUENA VISTA,FLORIDA,USA/
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77.000/40.420/
COATINGS: M2, Q1 / COOLANT LOOPS/DECONTAMINATION:Q2/DESIGN BASIS ACCIDENTS/NUCLEAR POWER PLANTS:M1/RADIATION EFFECTS/
SIMULATION/STABILITY/TEST FACILITIES/TESTING:Q2/

12/2/0000001-0000100// 42
33X0006737 NSA-33-03 77.500
(HEDL-TME--75-3)HEDL QUARTERLY TECHNICAL REPORT,JANUARY,FEBRUARY,MARCH 1975/
ATWOOD,J.M./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
LMFBR/
MAY 1975/AT/
IC=2 905 800/
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US/
77.500/
CLEANING:Q3/CORROSION:Q3/CORROSION PRODUCTS/CORROSIVE EFFECTS:Q4/COVER GAS/DECONTAMINATION/FAILED ELEMENT DETECTION:M,
Q1,Q2/FFTF REACTOR:M2/FISSION PRODUCTS/LMFBR TYPE REACTORS:M1/REACTOR COMPONENTS:M3,Q1,Q2/REMOVAL:Q4/SODIUM:M4/

12/2/0000001-0000100// 43
33R0006705 NSA-33-03 77.300
(RD/B/N--3438)EXAMINATION OF CORROSION ON PRIMARY SELECTOR VALVE BELLOWS/
RICHARDS,G.K./
CENTRAL ELECTRICITY GENERATING BOARD,BERKELEY (UK).BERKELEY NUCLEAR LABS./
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IC=1 559 000/
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GB/
CLEANING / CORROSION / ELECTRON MICROSCOPY / FAILED ELEMENT MONITORS:Q1/INORGANIC ACIDS/SEALS/SIZEWELL-A REACTOR:M1/
STAINLESS STEEL-18-8/VALVES/

12/2/0000001-0000100// 44
33P0004897 NSA-33-02 79.200
METHOD AND APPARATUS FOR REVERSE CIRCULATING NUCLEAR STEAM GENERATOR SECONDARY FLUID/
STITELER,F.Z./HONIGMANN,R.L./
TO COMBUSTION ENGINEERING,INC./

ATENT 3,900,000/
LED DATE 19 APR 1974/
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...ENING/CONFIGURATION/LIQUID FLOW/POWER REACTORS:M1/STEAM GENERATORS:M,Q1/TWO-PHASE FLOW/

12/2/0000001-0000100// 45
33...4330 NSA-33-02 77.100
...UM ENTRAINMENT IN AN ARGON FLOW:THE EVAPORATION AND CONDENSATION PROCESSES/
...E,M./MICHEL,A./
...HEAT MASS TRANSFER/1973/50...-516/

...M3)
ARGON / ENTRAINMENT/EVAPORATION:Q3/FUEL ASSEMBLIES:M2,Q1/FUEL RODS/REMOVAL/SODIUM:M3/SODIUM COOLED REACTORS:M1/SURFACE CLEANING:Q2/TEMPERATURE DEPENDENCE/

12/2/0000001-0000100// 46
33R0004703 NSA-33-02 77.600
(ANCR--1170)DECONTAMINATION AND DECOMMISSIONING OF THE EBR-1 COMPLEX.TOPICAL REPORT NO.3.NAK DISPOSAL PILOT PLANT TEST./
COMMANDER,J.C./LEWIS,L./HAMMER,R./
AEROJET NUCLEAR CO.,IDAHO FALLS,IDAHO (USA).IDAHO NATIONAL ENGINEERING LAB./
JUN 1975/DEP.NTIS $4.00./
IC=9 501 267/
US/
US/
DECOMMISSIONING:Q1/DECONTAMINATION:Q1/EBR-1 REACTOR:M1/NAK COOLED REACTORS/RADIOACTIVE WASTE DISPOSAL:Q1/

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33R0004634 NSA-33-02 77.200
(CENPD--67(REV.1)(ADD.2))IODINE DECONTAMINATION FACTORS DURING PWR STEAM GENERATION AND STEAM VENTING.TOPICAL REPORT/
COMBUSTION ENGINEERING,INC.,WINDSOR,CONN.(USA)/
AUG 1975/COMBUSTION ENGINEERING,INC.,WINDSOR,CT./
IC=1 687 000/
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US/
DECONTAMINATION: Q3 / EFFICIENCY / IODINE: M2, Q1/PRIMARY COOLANT CIRCUITS:M3,Q1/PWR TYPE REACTORS:M1/REMOVAL:Q2/STEAM GENERATORS/

12/2/0000001-0000100// 48
33J0004631 NSA-33-02 77.100
EFFECT OF DISSOLVED OXYGEN ON DEPRESSION OF THE CRUD FORMATION IN FEED WATER SYSTEM OF BWR/
MIZUNO,T./IWAHORI,T.(CENTRAL RESEARCH INST.OF ELECTRIC POWER INDUSTRY,KOMAE,TOKYO (JAPAN).TECHNICAL LAB.NO.1)/
DENRYOKU CHUO KENKYUSHO GIJUTSU DAIICHI KENKYUSHO HOKOKU/74011/JUL 1974/1-4,1-18/(IN JAPANESE)
JP/
JP/
(DCKDB)
BWR TYPE REACTORS: M3 / CHEMICAL REACTION KINETICS/CORROSION PRODUCTS/CORROSION PROTECTION:Q1,Q2/ELECTRIC POTENTIAL/ EQUILIBRIUM /FEEDWATER/FLOW RATE/IRON/OXYGEN/PASSIVITY/PH VALUE/PITTING CORROSION/PRIMARY COOLANT CIRCUITS:M2,Q3/STEELS: M1/TEMPERATURE DEPENDENCE/

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33C0002993 NSA-33-02 44.310
(ORP / CSD--75-1(VOL. 2)) PROCEEDINGS OF PUBLIC HEARINGS: PLUTONIUM AND THE OTHER TRANSURANIUM ELEMENTS.VOLUME 2. PROCEEDINGS OF HEARINGS IN DENVER,COLORADO,JANUARY 10,1975/

ONMENTAL PROTECTION AGENCY,WASHINGTON,D.C.(USA)OFFICE OF ... TION PROGRAMS/
T OF RELEASE OF PU AND OTHER TRANSURANIUM ELEMENTS TO THE ... IRONMENT ON HEALTH OF HUMAN POPULATIONS/
1975/
CONF-750133--P2/ENVIRONMENTAL PROTECTION AGENCY,WASHINGTON,DC./
IC=9 500 472/
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DENVER,COLORADO,USA/
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44.300/77.900/48.710/
BIBLIOGRAPHIES: Q1 /BIOLOGICAL RADIATION EFFECTS:Q1/CARCINOGENESIS/DECONTAMINATION/DOSIMETRY/ENVIRONMENT/ENVIRONMENTAL EFFECTS: Q1/EXTRAPOLATION/FOOD CHAINS/HEALTH HAZARDS:Q1,Q2/HUMAN POPULATIONS:M2/INTERNAL IRRADIATION/LABORATORY ANIMALS/ MAXIMUM PERMISSIBLE BODY BURDEN/MEETINGS:Q1/PLUTONIUM:M1/PLUTONIUM 238/PLUTONIUM 239/PLUTONIUM 240/RADIATION MONITORING/ RADIATION PROTECTION/RADIONUCLIDE KINETICS/RADIONUCLIDE MIGRATION/SAFETY STANDARDS/STANDARDS/TRANSURANIUM ELEMENTS/

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33R0002517 NSA-33-01 79.700
(DOCKET-50015--239)ENRICO FERMI ATOMIC POWER PLANT,UNIT 1.ANNUAL REPORT,JUNE 1974--JUNE 1975/
POWER REACTOR DEVELOPMENT CO.,DETROIT,MICH.(USA)/
ANNUAL REPORT,JUNE 1974--JUNE 1975/
26 AUG 1975/
IC=5 286 000/
US/
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77.400/
DECONTAMINATION / ENRICO FERMI-1 REACTOR: M1 /FUEL ASSEMBLIES/NOZZLES/RADIATION PROTECTION/REACTOR DISMANTLING:M,Q1/ REACTOR OPERATION/SODIUM/STORAGE/TESTING/TRANSPORT/

12/2/0000001-0000100// 51
33J0002505 NSA-33-01 79.400
PROGRAMM HREX AT THE INSTITUTE OF NUCLEAR RESEARCH/
JURICKA,V./
NUKLEON/2/SEP 1974/51-55/(IN CZECH)
CS/
CS/
(NKLN:)
SCHUNICE A-1 REACTOR:M1/BURNUP/COMPUTER CODES:M2/CORROSION PRODUCTS/CUTTING/DEFORMATION/DENSITY/M CODES:Q2/IMPURITIES/ MATERIALS TESTING/PHYSICAL RADIATION EFFECTS/RESEARCH PROGRAMS/SPENT FUEL ELEMENTS:Q1/

12/2/0000001-0000100// 52
33C0002486 NSA-33-01 79.200
(INIS-MF--1702)STUDY ON THE REGULARITIES OF CORROSION PRODUCT,TRANSFER,AND FORMATION OF DEPOSITS ON THE INNER SURFACES OF WATER-COOLED POWER REACTOR CIRCUITS AND ON CONDITIONS TO PREVENT THEIR FORMATION/
SLYUSAREV,P.N./BELOBORODOV,V.V./OVECHKIN,D.M./
GOSUDARSTVENNYJ KOMITET PO ISPOL*ZOVANIYU ATOMNOJ EHNERGII SSSR,MOSCOW/
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CONF-7406108--3/
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OBNINSK,USSR/
25 JUN 1974/
CORROSION PRODUCTS:Q2/DEPOSITS/REACTOR COOLING SYSTEMS:M2,Q1/WATER COOLED REACTORS:M1/

[illegible] NSA-33-01 77.000
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KENDALL,E.W./KANG,D.K./
AEROJET NUCLEAR CO.,IDAHO FALLS,IDAHO (USA).IDAHO NATIONAL ENGINEERING LAB./
JUL 1975/DEP.NTIS $10.60/
IC=9 501 267/
US/
US/
77.600/
DECONTAMINATION: Q1, Q2 / EBR-1 REACTOR:M1/HAZARDS/POTASSIUM/REACTOR DECOMMISSIONING:Q1,Q2/REACTOR DISMANTLING/SODIUM/
ZPR-3 REACTOR:M2/

12/2/0000001-0000100// 54
33J0002276 NSA-33-01 77.100
TRANSPORT OF RADIOACTIVE CORROSION PRODUCTS IN HIGH-TEMPERATURE WATER.I.RECIRCULATING LOOP EXPERIMENTS/
LISTER,D.H./
CHALK RIVER NUCLEAR LABS.,ONTARIO/
PWR AND BWR/
NUCLSCI ENG./5872/OCT 1975/239-251/
CA/
US/
(NSENA)
77.200/
BWR TYPE REACTORS: M2/CORROSION PRODUCTS:Q3/DEPOSITION/LIQUID FLOW/MOCKUP/PRIMARY COOLANT CIRCUITS:M3,Q1,Q2/PWR TYPE
REACTORS:M1/

12/2/0000001-0000100// 55
33C0002260 NSA-33-01 77.000
(INIS-MF--1702)DEVELOPMENT OF TECHNICAL MEANS FOR DECONTAMINATION OF RADIOACTIVE EQUIPMENT OF NUCLEAR POWER PLANTS/
VLASOV,I.N./VORONEZHEV,L.N./DREKHOV,V.M./SEDOV,V.M./SIMANOVSKII,YU.M./
GOSUDARSTVENNYJ KOMITET PO ISPOL'ZOVANIYU ATOMNOJ ENERGII SSSR,MOSCOW/
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JUBILEE CONFERENCE DEDICATED TO THE TWENTIETH ANNIVERSARY OF NUCLEAR POWER ENGINEERING/
DONINSK,USSR/
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DECONTAMINATION:Q2/DEPOSITS/NUCLEAR POWER PLANTS:M1/REACTOR COMPONENTS:M2,Q1/

12/2/0000001-0000100// 56
32X0030235 NSA-32-12 77.600
(AI-ERDA--13147) SODIUM TECHNOLOGY AND COVER GAS SEAL DEVELOPMENT PROGRAMS.QUARTERLY TECHNICAL PROGRESS REPORT,
JANUARY--MARCH 1975/
ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA)/
LMFBR/FFTF/
15 MAY 1975/ATI
IC=9 500 331/
US/
US/
77.500/50.330/
CLEANING: Q4/COATINGS/ELASTOMERS:M8/FFTF REACTOR:M2/FRICTION:Q5/LMFBR TYPE REACTORS:M1/PERFORMANCE TESTING:Q5/PHYSICAL
PROPERTIES:Q7,Q8/REACTOR COMPONENTS:M6/REACTOR COOLING SYSTEMS:M3,Q1,Q2/REACTOR MATERIALS:M5/RESEARCH PROGRAMS:Q3/SEALS:
M6/SILICONES:M7/SODIUM/SOLVENT PROPERTIES/SOLVENTS/

32C[illegible]2 NSA-32-12 77.400
([illegible] CONF--73-562-003) SCANNING ELECTRON MICROSCOPY AND ENERG[illegible] DISPERSIVE X-RAY MICROANALYSIS OF NUCLEAR REACTOR
CORROSION PARTICLES/
WIKJORD,A.G./MAYOR,G.H./DOERN,F.E./
ATOMIC ENERGY OF CANADA LTD.,PINAWA,MANITOBA.WHITESHELL NUCLEAR RESEARCH ESTABLISHMENT/
(ND)/
CONF-731173--1/INIS/
IC-0 653 000/
CA/
XA/
SYMPOSIUM ON WATER QUALITY PARAMETERS-SELECTION,MEASUREMENT AND MONITORING/
BURLINGTON,ONTARIO,CANADA/
19 NOV 1973/
CANDU TYPE REACTOR:M1/CORROSION PRODUCTS:02/ELECTRON MICROSCOPY/PARTICLE SIZE/PARTICLES/REACTOR COOLING SYSTEMS:M2,01/
X-RAY SPECTROSCOPY/

12/2/0000001-0000100// 58
32J0030139 NSA-32-12 77.100
HYDROGEN RECOMBINATION SYSTEM FOR LIGHT-WATER REACTORS,AFTER A LOSS-OF-COOLANT ACCIDENT/
PERRIE,J.D.(ATOMICS INTERNATIONAL DIV.,CANOGA PARK,CALIF.(USA))/GREGOR,F.E./HONKALA,J.W.(DETROIT EDISON CO.,MICH.(USA))
1/
ARCH.ENERGIEWIRTSCH./29/5/MAY 1975/460-461/(IN GERMAN)
US/
DE/
(AVEWA)
77.200/
BINARY MIXTURES/BWR TYPE REACTORS:M1/CORROSION PRODUCTS/DESIGN BASIS ACCIDENTS/ENRICO FERMI-2 REACTOR/HYDROGEN/LOSS OF COOLANT / MIXING RATIO / OXIDATION / OXYGEN / PWR TYPE REACTORS: M2/RADIOLYSIS/RECOMBINERS:M3,01,02/SAFETY STANDARDS/
SPECIFICATIONS:03/WATER/ZIRCONIUM/

12/2/0000001-0000100// 59
32J0030137 NSA-32-12 77.100
RECYCLING ION EXCHANGE RESINS/
LANNIN,T.E./
GENERAL ELECTRIC CO.,PLEASANTON,CA/
BWR FEED WATER DEMINERALIZER RESINS/
POWER ENGG/79/9/SEP 1975/52-54/
US/
US/
(PCENA)
BWR TYPE REACTORS: M1 / CLEANING: 02 / COOLANT CLEANUP SYSTEMS:M3,01/DEMINERALIZERS:M2,03/FEEDWATER/ION EXCHANGE/ION EXCHANGE MATERIALS/REACTOR COOLING SYSTEMS/REPROCESSING/RESINS/WASTE DISPOSAL/WATER CHEMISTRY/

12/2/0000001-0000100// 60
32C0027418 NSA-32-11 79.200
(CONF-701074--P2)PROSPECTS OF THE USE OF COMPLEXONES IN NUCLEAR POWER ENGINEERING/
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE "ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS"/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
UL'YANOVSK,USSR/
5 OCT 1970/
CLEANING/CORROSION INHIBITORS/CORROSION PROTECTION/REACTOR COOLING SYSTEMS:M1/SURFACES/WATER CHEMISTRY:01/

12/2/0000001-0000100// 61
32J0027269 NSA-32-11 77.400
AUTORADIOGRAPHY AND SCANNING ELECTRON MICROSCOPY OF HEAT TRANSPORT PARTICULATES/

S.L./
ONT.HYDRO RES.Q./26/3/1974/25-29/
CA/
CA/
(OHRQA)
AUTORADIOGRAPHY/CORROSION PRODUCTS/ELECTRON MICROSCOPY/FILTERS/PARTICLES/PICKERING-1 REACTOR:M1/PICKERING-2 REACTOR:M2
/PICKERING-3 REACTOR:M3/PICKERING-4 REACTOR:M4/RADIATION MONITORING/REACTOR COOLING SYSTEMS:Q1,Q2,Q3,Q4/

12/2/0000001-0000100// 62
32J0027268 NSA-32-11 77.400
SOURCE AND NATURE OF RADIOACTIVITY IN NUCLEAR REACTOR SYSTEMS/
NEIL,B.C.J./
ONT.HYDRO RES.Q./26/3/1974/3-11/
CA/
CA/
(OHRQA)
CONTAMINATION / CORROSION PRODUCTS /DECONTAMINATION/GAMMA SPECTROSCOPY/PHWR TYPE REACTORS:M1/RADIATION MONITORING:Q1/
RADIOACTIVATION/REACTOR COOLING SYSTEMS/

12/2/0000001-0000100// 63
32J0027267 NSA-32-11 77.400
CORROSION AND RADIOACTIVITY DEPOSITION ON METAL COUPONS EXPOSED IN A REACTOR SYSTEM/
VEKRIS,S.L./
PHWR/
ONT.HYDRO RES.Q./26/3/1974/12-17/
CA/
CA/
(OHRQA)
CARBON STEELS / CORROSION /CORROSION PRODUCTS:Q2/DECONTAMINATION/DEPOSITION/FILMS/MONEL/OXIDES/PHWR TYPE REACTORS:M1/
RADIATION MONITORING/REACTOR COOLING SYSTEMS:M2,Q1/STAINLESS STEELS/ZIRCALOY 2/

12/2/0000001-0000100// 64
32J0027266 NSA-32-11 77.400
SOME ASPECTS OF CHEMICAL AND RADIOCHEMICAL ANALYSIS FOR THE CANDU REACTOR SYSTEM/
GUEST,A./
PHWR/
ONT.HYDRO RES.Q./26/3/1974/19-24/
CA/
CA/
(OHRQA)
ABSORPTION SPECTROSCOPY/CHEMICAL COMPOSITION/CORROSION PRODUCTS:Q2/GAMMA SPECTROSCOPY/HEAVY WATER/PARTICLES/PHWR TYPE
REACTORS:M1/RADIATION MONITORING/RADIOISOTOPES/REACTOR COOLING SYSTEMS:M2,Q1/

12/2/0000001-0000100// 65
32Z0027221 NSA-32-11 77.200
(CONF-701074--P2) ANALYSIS OF THE PROCESSES OF ACCUMULATION OF FISSION PRODUCTS IN THE PRELIMINARY CIRCUIT OF THE
WATER-MODERATED WATER-COOLED POWER REACTOR/
MIRONOV,V.N./TEPLOV,P.V./KAZAKOV,V.A./
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
US/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
CONTAMINATION / CORROSION PRODUCTS / DEPOSITION /FISSION PRODUCT RELEASE/FISSION PRODUCTS/MATHEMATICAL MODELS/PRIMARY
COOLANT CIRCUITS:Q1/WWER-1 REACTOR:M1/

15 NSA-32-11 77.100
701074--P21 METHOD OF ESTIMATION OF FISSION-FRAGMENT AC...Y IN THE COOLANT,DISCHARGE FROM INDUSTRIAL ATOMIC ELECTRIC POWER PLANTS HAVING ROD-TYPE FUEL ELEMENTS,COOLED BY BOILING WATER/
GUSEINOV,A.G./KOBOZOV,M.G./KHARIZOMENOV,U.V./
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
BWR TYPE REACTORS: 41 / CONTAMINATION/CORROSION PRODUCTS/DEPOSITION/FISSION PRODUCT RELEASE:01/FISSION PRODUCTS/FUEL ELEMENT FAILURE/PRIMARY COOLANT CIRCUITS/

12/2/0000001-0000100// 67
32C0027214 NSA-32-11 77.100
(CONF-701074--P21QUESTION OF EXPLOITATION OF ION-EXCHANGE FILTERS FOR SINGLE CIRCUIT ATOMIC ELECTRIC POWER PLANTS/
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BWR/
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
BWR TYPE REACTORS: 41/DATA/DECONTAMINATION/FILTERS:02/FISSION PRODUCTS/ION EXCHANGE MATERIALS/PURIFICATION/RADIATION MONITORING/REACTOR COOLING SYSTEMS:42,01/STEAM CONDENSERS/VK-50 REACTOR/WATER CHEMISTRY/

12/2/0000001-0000100// 68
32C0027213 NSA-32-11 77.100
(CONF-701074--P2) DISTRIBUTION OF DEPOSITS AND THEIR ACTIVITYION THE SURFACES OF EQUIPMENT AND COMMUNICATIONS OF A SINGLE-CIRCUIT ATOMIC ELECTRIC POWER PLANT/
CHECHETKIN,U.V./ZABELIN,A.I./ROZDESTVENSKAYA,L.N./KIZIN,V.D./SYVATESHEVA,T.S./
1970/
PROCEEDINGS OF THE SCIENTIFIC-TECHNICAL CONFERENCE **ATOMIC POWER,FUEL CYCLES,RADIATION STUDY OF MATERIALS**/
UR/
US/
CONFERENCE ON ATOMIC POWER,FUEL CYCLES,AND RADIATION STUDY OF MATERIALS/
ULYANOVSK,USSR/
5 OCT 1970/
CORROSION PRODUCTS / DATA /DEPOSITION/FISSION PRODUCTS/RADIATION MONITORING/REACTOR COOLING SYSTEMS:01/SURFACES/VK-50 REACTOR:M1/WATER CHEMISTRY/

12/2/0000001-0000100// 69
32P0025451 NSA-32-10 79.200
CLEANING CONTAMINATED SURFACES OF NUCLEAR POWER PLANTS AND RECOVERY OF REMOVED SURFACE PARTICLES/
KERN,R./SEYD,G./PAULSEN,U./
TO SIEMENS AKTIENGESELLSCHAFT/
PATENT/WATER COOLED AND HEAVY WATER COOLED REACTORS/
US PATENT 3,895,465/
PRIORITY DATE 4 DEC 1972,F.R.GERMANY/
22 JUL 1975/
GE/
US/
BORON OXIDES / DECONTAMINATION: 03/HEAVY WATER COOLED REACTORS:M2/PRIMARY COOLANT CIRCUITS/STEAM GENERATORS:43,01,02/SURFACE CLEANING/WATER-COOLED REACTORS:M1/

15459 NSA-32-10 79.200
METHOD OF CLEANING NUCLEAR POWER PLANTS/
BORN,R./SEYD,G./PAULSEN,U./
TO SIEMENS AKTIENGESELLSCHAFT/
PATENT/WATER COOLED AND HEAVY WATER COOLED POWER REACTORS/
US PATENT 3,894,264/
PRIORITY DATE 4 DEC 1972;FR.GERMANY/
15 JUL 1975/
DE/
US/
BORON OXIDES/DECONTAMINATION:Q4/HEAVY WATER COOLED REACTORS:M3/PIPES/POWER REACTORS:M1/PRIMARY COOLANT CIRCUITS:M6,Q1,
Q2,Q3/PUMPS/STEAM CONDENSERS/STEAM GENERATORS/SURFACE CLEANING/WATER COOLED REACTORS:M2/

12/2/0000001-0000100// 71
32F0025359 NSA-32-10 77.900
(ANCR--1243)SAFETY ANALYSIS REPORT.DECONTAMINATION AND DECOMMISSIONING OF THE EBR-I COMPLEX/
COMMANDER,J.C./MACBETH,P.J./MICHELS,D.E./
AEROJET NUCLEAR CO.,IDAHO FALLS,IDAHO (USA)/
JUN 1975/
SAR--74-3/DEP.NTIS $5.45./
IC=0 047 300/
US/
US/
77.500/
DECONTAMINATION/EBR-I REACTOR:M1/HAZARDS/POTASSIUM/REACTOR COMPONENTS/REACTOR DECOMMISSIONING:Q1/SODIUM/

12/2/0000001-0000100// 72
32J0025295 NSA-32-10 77.500
TRANSPORT MODEL FOR RADIOACTIVE CORROSION PRODUCT DEPOSITION IN AN LMFBR/
CLEPER,M.M./TAYLOR,G.R.(WESTINGHOUSE ELECTRIC CORP.,MADISON,PA.(USA).ADVANCED REACTORS DIV.)/
NUCL.ENG.DES./32/2/1975/246-251/
US/
NL/
(NEDEA)
COBALT 58 / COBALT 60 / CORROSION /CORROSION PRODUCTS:Q2/DEPOSITION/FUEL CANS/GAMMA RADIATION/IRRADIATION/LMFBR TYPE
REACTORS:M1/MANGANESE 54/MASS TRANSFER/PRIMARY COOLANT CIRCUITS:M2,Q1/REACTOR CORES/STAINLESS STEELS/

12/2/0000001-0000100// 73
32R0024056 NSA-32-09 79.700
(DOCKET-50255--543)PALISADES NUCLEAR PLANT.SEMIANNUAL OPERATING REPORT,JANUARY--JUNE 1975/
CONSUMERS POWER CO.,JACKSON,MICH.(USA)/
SEMIANNUAL OPERATING REPORT,JANUARY--JUNE 1975/
29 AUG 1975/DEP:NTIS $19.75:/
IC=1 999 000/
US/
US/
77.200/
AUXILIARY WATER SYSTEMS / CLEANING /CONTAINMENT/CONTROL ROD DRIVES/CONTROL SYSTEMS/CRACKS/ENGINEERED SAFETY SYSTEMS/
ENVIRONMENT / FEEDWATER / FEEDWATER HEATERS / FISSION PRODUCT RELEASE/GASEOUS WASTES/LEAKS/LIQUID WASTES/METEOROLOGY/
MONITORING / NEUTRON DETECTORS / NOISE /OFF-GAS SYSTEMS/PALISADES-1 REACTOR:M1/PIPE FITTINGS/POWER GENERATION/RADIATION
MONITORING / RADIOACTIVE EFFLUENTS/REACTOR MAINTENANCE/REACTOR OPERATION:Q1/REACTOR SHUTDOWN/REPAIR/ROTORS/SCRAM/SEALS/
SECONDARY COOLANT CIRCUITS/SOLENOIDS/STEAM GENERATORS/STEAM LINES/STEAM SEPARATORS/TESTING/TUBES/TURBINES/VALVES/WATER
CHEMISTRY/

12/2/0000001-0000100// 74
32P0024013 NSA-32-09 79.300
IMPROVEMENTS IN OR RELATING TO THE DECONTAMINATION OF FUEL ELEMENT SHEATHS/
ROBERTSON,R.I./ORR,T.F./

ITISH NUCLEAR FUELS LTD//
PATENT/
BRITISH PATENT 1,382,915/B//
FILED DATE 25 APR 1972/
5 FEB 1975/
UK/
UK/
DECONTAMINATION: G1 / DIAGRAMS/ELECTRIC SPARKS/ELECTRODES/FUEL CANS:M1/INERT ATMOSPHERE/LABORATORY EQUIPMENT/RDTATION/
SPECIFICATIONS/SURFACE CLEANING/SURFACE CONTAMINATION/

12/2/0000001-0000100// 75
32C0023624 NSA-32-09 77.500
(JUL--11(BD.11)DETERMINATION OF RADIONUCLIDES IN THE PRIMARY COOLANT LOOP OF SODIUM-COOLED NUCLEAR REACTORS/
STAMM,H.M./
KERNFORSCHUNGSANLAGE JUELICH G. M. B. H. (F.R.GERMANY).ZENTRALINSTITUT FUER ANALYTISCHE CHEMIE/KERNFORSCHUNGSZENTRUM
KARLSRUHE (F.R.GERMANY).INST.FUER RADIOCHEMIE/
NOV 1974/(IN GERMAN)
AED-CONF--73-702-003/INIS/
WORKSHOP ON MODERN ANALYTICAL METHODS.VOL.1/
STOEPPLER,M.(ED.)/
IC*9 200 173/3 588 000/
GE/
GE/
WORKSHOP ON MODERN ANALYTICAL METHODS/
JUELICH,F.R.GERMANY/
15 OCT 1973/
ACTIVATION ANALYSIS: D3/CONTAMINATION:Q1/CORROSION PRODUCTS/DISTILLATION/DISTRIBUTION/FISSION PRODUCTS/IMPURITIES/KNK
REACTOR/LIQUID METALS/LMFBR TYPE REACTORS:M2/PRIMARY COOLANT CIRCUITS:M1,Q2/RADIOACTIVATION/SAMPLING/SODIUM:M3/SODIUM 24
/

12/2/0000001-0000100// 76
32C0023623 NSA-32-09 77.500
(JUL--11(BD. 11)) DETERMINATION OF /SUP 89/SR AND /SUP 90/SR IN THE DEVELOPMENT OF HTR-FUEL ELEMENTS AND OF IODINE IN
SPREADING EXPERIMENTS/
STOEPPLER,M./MAY,K./MATTHES,W./
KERNFORSCHUNGSANLAGE JUELICH G. M. B. H. (F.R.GERMANY).ZENTRALINSTITUT FUER ANALYTISCHE CHEMIE/KERNFORSCHUNGSZENTRUM
KARLSRUHE (F.R.GERMANY).INST.FUER RADIOCHEMIE/
NOV 1974/(IN GERMAN)
AED-CONF--73-702-002/INIS/
WORKSHOP ON MODERN ANALYTICAL METHODS.VOL.1/
STOEPPLER,M.(ED.)/
IC*9 200 173/3 588 000/
GE/
GE/
WORKSHOP ON MODERN ANALYTICAL METHODS/
JUELICH,F.R.GERMANY/
15 OCT 1973/
(A) CHEMICAL ANALYSIS: D3 / (A)DECONTAMINATION/(A)DISSOLUTION/(A)FISSION PRODUCTS/(A)GRAPHITE:M3/(A)HTGR TYPE
REACTORS / (A)ION EXCHANGE CHROMATOGRAPHY/(A)RADIOCHEMICAL ANALYSIS:Q1,Q2/(A)SPENT FUEL ELEMENTS/(A)SPHERES/(A)
STRONTIUM 89:M1/(A)STRONTIUM 90:M2/(B)AIR/(B)CHEMICAL ANALYSIS/(B)DIFFUSION:Q4/(B)ENVIRONMENT/(B)FUNCTIONAL MODELS
/(B)GASEOUS WASTES/(B)IODINE:M4/(B)NUCLEAR FACILITIES/(B)PHOTOMETRY/

12/2/0000001-0000100// 77
32P0021638 NSA-32-08 77.900
(DUN--389815 REACTOR DEACTIVATION ENGINEERING REPORT/
BRINKMAN,L.J/
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
29 FEB 1968/DEP.NTIS $4.00./

US/
DECONTAMINATION:Q1/HANFORD PRODUCTION REACTORS:M1/PLANNING/REACTOR SHUTDOWN/RECOMMENDATIONS/

12/2/0000001-0000100// 78
32R0021550 NSA-32-08 77.700
(DUN--7636)RADIOLOGICAL STATUS REPORT.DEACTIVATION OF THE 105-KE REACTOR PLANT/
WESTOVER,W.G./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
30 APR 1971/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
BUILDINGS/DECONTAMINATION:Q1/HANFORD PRODUCTION REACTORS:M1/RADIATION HAZARDS/RADIATION MONITORING/

12/2/0000001-0000100// 79
32R0021549 NSA-32-08 77.700
(DUN--7630)RADIOLOGICAL STATUS REPORT DEACTIVATION OF THE 105-KW REACTOR PLANT/
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
26 APR 1971/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
BUILDINGS/DECONTAMINATION:Q1/HANFORD PRODUCTION REACTORS:M1/RADIATION HAZARDS/

12/2/0000001-0000100// 80
32R0021548 NSA-32-08 77.700
(DUN--7593)RADIOLOGICAL STATUS REPORT DEACTIVATION OF THE 105-B REACTOR PLANT/
WESTOVER,W.G./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
12 APR 1971/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
BUILDINGS/DECONTAMINATION/HANFORD PRODUCTION REACTORS:M1/RADIATION MONITORING:Q1/

12/2/0000001-0000100// 81
32R0021547 NSA-32-08 77.700
(DUN--6664)K THROUGH REACTOR DECONTAMINATION ENGINEERING REPORT/
BRINKMAN,L.B./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
21 JAN 1970/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
DECONTAMINATION:Q1/HANFORD PRODUCTION REACTORS:M1/PLANNING/REACTOR COOLING SYSTEMS/

12/2/0000001-0000100// 82
32R0021546 NSA-32-08 77.700
(DUN--3062)RADIOLOGICAL STATUS REPORT DEACTIVATION STATUS:D PLANT/
TATUM,W.J./
DOUGLAS UNITED NUCLEAR,INC.,RICHLAND,WASH.(USA)/
6 OCT 1967/DEP.NTIS $4.00./
IC=2 191 000/
US/
US/
DECONTAMINATION:Q1/HANFORD PRODUCTION REACTORS:M1/RADIATION MONITORING/REACTOR SHUTDOWN/

1512 NSA-32-08 77.500
(WCRD-NA--3045-25)STABILITY OF EXTRANEOUS ARTIFACTS IN LIQUID SODIUM/
PEACHAM,S.A./WHITLOW,G.A./
WESTINGHOUSE ELECTRIC CORP.,MADISON,PA.(USA).ADVANCED REACTORS DIV./
CONSTRUCTION MATERIALS IN LMFBR SODIUM SYSTEM/
1975/AT/
IC=6 916 000/
US/
US/
ASBESTOS:M / CHEMICAL PROPERTIES / CLEANING: 02/COTTON:M/GRAPHITE:M/HIGH TEMPERATURE/LMFBR TYPE REACTORS:M1/PHYSICAL PROPERTIES/PLASTICS:M/REACTOR COOLING SYSTEMS:M2,01/REACTOR VESSELS/SODIUM:M/THERMAL DEGRADATION/WOOD:M/

12/2/0000001-0000100// 86
32R0021505 NSA-32-08 77.500
(HEDL-TME--75-51) EXPOSURE OF PRECRACKED AND PRELOADED FRACTURE MECHANICS SPECIMENS IN LIQUID SODIUM,WITH AN INTERMEDIATE ADIST NITROGEN CLEANING/
JAMES,L.A./BORISCH,R.R./
HANFORD ENGINEERING DEVELOPMENT LAB.,RICHLAND,WASH.(USA)/
MAY 1975/DEP.NTIS $4.00./
IC=2 906 000/
US/
US/
CHEMICAL REACTIONS/CLEANING/CRACKS:02/LMFBR TYPE REACTORS:M1/MECHANICAL TESTS/NITROGEN/REACTOR COMPONENTS:M2,01/SODIUM /STAINLESS STEEL-304/STRESSES/

12/2/0000001-0000100// 85
32J0019418 NSA-32-08 40.450
SEPARATION OF ANTIMONY-125 IN FISSION PRODUCTS/
ARATSU,E./TOMIZAWA,T./ARATONO,Y.(JAPAN ATOMIC ENERGY RESEARCH INST.,TOKAI,IBARAKI.TOKAI RESEARCH ESTABLISHMENT)/
J.NUCL.SCI.TECHNOL.(TOKYO)/11/12/DEC 1974/571-574/
JA/
JA/
(JNSTA)
79.300/
ADSORPTION / ANTIMONY-125: M1 / CHROMATOGRAPHY:01/DECONTAMINATION/DISTRIBUTION FUNCTIONS/EFFICIENCY/FISSION PRODUCTS/ HYDROBROMIC ACID/NITRIC ACID/SILICA GEL/SPENT FUELS/SULFURIC ACID/

12/2/0000001-0000100// 86
32R0018940 NSA-32-07 77.800
(RN-S--CC12)RADIOACTIVE MATERIALS COMPLEX DESIGN DATA AND STUDIES/
AEROJET-GENERAL CORP.,AZUSA,CALIF.(USA)/
NERVA/
FEB 1964/DEP.NTIS $4.75./
IC=0 036 000/
US/
US/
52.200/
DECONTAMINATION / DESIGN: 02 / FEASIBILITY STUDIES/NERVA REACTOR:M1/RADIOACTIVE MATERIALS/RADIOACTIVE WASTE DISPOSAL/ RADIOACTIVE WASTE FACILITIES:M2,01/RADIOACTIVE WASTE STORAGE/SPENT FUEL STORAGE/

12/2/0000001-0000100// 87
32R0018903 NSA-32-07 77.800
(ASC--2584)OPERATIONAL REQUIREMENTS FOR RADIOACTIVE MATERIALS HANDLING,DECONTAMINATION,AND STORAGE COMPLEX AT NRDS/
AEROJET-GENERAL CORP.,AZUSA,CALIF.(USA)/
NERVA/
JUN 1963/DEP.NTIS $8.00./
IC=0 036 000/
US/

52.200/
DECONTAMINATION /NERVA REACTOR:M1/RADIOACTIVE MATERIALS/RADIOACTIVE WASTE DISPOSAL/RADIOACTIVE WASTE FACILITIES:M2,Q1/
RADIOACTIVE WASTE STORAGE/SPECIFICATIONS:Q2/SPENT FUEL STORAGE/

12/2/0000001-0000100// 88
32J0018659 NSA-32-07 77.500
AIR MONITORING TECHNIQUES FOR RADIOACTIVE SODIUM AND FISSION PRODUCTS IN LMFBR/
YOSHIDA,Y./NARITOMI,M./MURATA,M.(JAPAN ATOMIC ENERGY RESEARCH INST.,TOKAI,IBARAKI,TOKAI RESEARCH ESTABLISHMENT)/
NIPPON GENSHIRYOKU GAKKAISHI/16/9/SEP 1974/478-485/(IN JAPANESE)
JA/
JA/
(NOEGA)
AERIAL MONITORING / AEROSOL MONITORING:Q1,Q2/CONTAMINATION/CORROSION PRODUCTS/FISSION PRODUCTS/IODINE 131/LEAKS/LMFBR
TYPE REACTORS:M1/PRIMARY COOLANT CIRCUITS/RADIOACTIVE AEROSOLS:M2/SODIUM COOLED REACTORS/SODIUM 24/

12/2/0000001-0000100// 89
32R0018824 NSA-32-07 77.200
(NP--20432)CHEMICAL,BIOLOGICAL,AND CORROSION INVESTIGATIONS RELATED TO THE TESTING OF THE DIABLO CANYON UNIT-1 COOLING
WATER SYSTEM/
HARRICK,J.A./SHARP,S.G./FRIEDRICH,S.J./
PACIFIC GAS AND ELECTRIC CO.,SAN FRANCISCO,CALIF.(USA).DEPT.OF ENGINEEERING RESEACH/
1975/PACIFIC GAS AND ELECTRIC CO.,SAN FRANCISCO,CA./
IC=9 501 157/
US/
US/
AQUATIC ORGANISMS /CHEMICAL EFFLUENTS/CONDENSERS/COPPER/CORROSION PRODUCTS/DIABLO CANYON-1 REACTOR:M1/REACTOR COOLING
SYSTEMS:Q1/TESTING/

12/2/0000001-0000100// 90
32P0017461 NSA-32-07 48.510
(JAERI-M--5866)HEALTH PHYSICS AND SAFETY IN JAERI,NO.16.(APRIL 1,1973--MARCH 31,1974)/
JAPAN ATOMIC ENERGY RESEARCH INST.,TOKYO/
JAPAN/
NOV 1974/(IN JAPANESE)INIS/
IC=3 413 000/
JA/
JA/
48.610/52.200/77.900/
DECONTAMINATION/ENVIRONMENT/JAPAN/NUCLEAR FACILITIES:M2/PERSONNEL DOSIMETRY/PERSONNEL MONITORING/RADIATION PROTECTION:
M1,M2/REACTOR SAFETY/RESEARCH PROGRAMS:Q1/WASTE MANAGEMENT/

12/2/0000001-0000100// 91
32J0016942 NSA-32-07 40.430
THE MANAGEMENT OF RADIOACTIVE WASTES IN NUCLEAR POWER GENERATION/
KIMURA,T.(ELECTRIC POWER DEVELOPMENT CO.LTD.,TOKYO (JAPAN))/
DENGEN KAIHATSU K.K.,CHOSA SHIRYO/52/MAR 1974/119-146/(IN JAPANESE)
JA/
JA/
(DKKKA)
52.200/79.300/
CONTAMINATION / DECONTAMINATION / ENVIRONMENT /FUEL REPROCESSING PLANTS:M2/GASEOUS WASTES/JAPAN/KRYPTON/LIQUID WASTES/
NUCLEAR POWER PLANTS:M1/RADIOACTIVE WASTE DISPOSAL:Q1,Q2/RADIOACTIVE WASTE MANAGEMENT:M/RADIOACTIVE WASTE PROCESSING:Q1,
Q2/RADIOACTIVE WASTES/SOLID WASTES/SOLIDIFICATION/

12/2/0000001-0000100// 92
32P0016621 NSA-32-06 79.200
PROCESS FOR WITHDRAWING RADIOACTIVE GASES FROM A NUCLEAR REACTOR/

ERMAN,R./BROWN,W.K./
ESTINGHOUSE ELECTRIC CORP.,PITTSBURGH,PA.(USA)/
PATENT/
FRENCH PATENT 2,209,177/A//
15 OCT 1973/(IN FRENCH)
US/
FR/
DECONTAMINATION:Q1/OFF-GAS SYSTEMS:M/PRIMARY COOLANT CIRCUITS:M1/

12/2/0000001-0000100// 93
32J0016580 NSA-32-06 77.900
APPLICATION OF EVAPORATION TO THE TREATMENT OF LIQUIDS IN THE NUCLEAR INDUSTRY/
GODBEE,H.W./KIBBEY,A.H./
NUCL.SAF./16/4/1975/458-469/
US/
US/
(NUSAA)
40.430/
DECONTAMINATION / EFFICIENCY / EVAPORATION: Q2 / EVAPORATORS / LIQUID WASTES/NUCLEAR POWER PLANTS:M1/RADIOACTIVE WASTE PROCESSING:M2,Q1/RADIOACTIVE WASTES/

12/2/0000001-0000100// 94
32R0016302 NSA-32-06 77.500
(GEAP--3289)BWL DECONTAMINATION/
SIEGEL,S./
GENERAL ELECTRIC CO.,PLEASANTON,CALIF.(USA).VALLECITOS ATOMIC LAB./
[illegible] NOV 1959/GENERAL ELECTRIC CO.,SAN JOSE,CA./
[illegible] 651 000/
US/
US/
[illegible]/
DECONTAMINATION:Q2/GETR REACTOR:M1/IN PILE LOOPS:M2,Q1/RADIATION DOSES/STAINLESS STEELS/

12/2/0000001-0000100// 95
32R0016279 NSA-32-06 77.500
EXTRACTION METHOD FOR THE FISSION PRODUCTS OF A NUCLEAR REACTOR COOLANT/
COOPER,M.H./
TO WESTINGHOUSE ELECTRIC CORP.,PITTSBURGH,PA.(USA)/
LMFBR/PATENT/
FRENCH PATENT 2,209,176/A//
27 SEP 1973/(IN FRENCH)
US/
FR/
40.140/
COLD TRAPS: Q3 / DECONTAMINATION:Q2/FISSION PRODUCTS:M3/LMFBR TYPE REACTORS:M1/PRIMARY COOLANT CIRCUITS:Q1,M2/SOLVENT EXTRACTION/

12/2/0000001-0000100// 96
32C0016225 NSA-32-06 77.200
RADIOACTIVE CONTAMINATION IN PWR PRIMARY CIRCUITS/
FREJAVILLE, G. (CEA CENTRE D'ETUDES NUCLEAIRES DE FONTENAY-AUX-ROSES (FRANCE).DEPT.DE PHYSIQUE DES REACTEURS ET MATHEMATIQUES APPLIQUEES) / BESLU, P. (CEA CENTRE D'ETUDES NUCLEAIRES DE SACLAY,91 - GIF-SUR-YVETTE (FRANCE).DEPT.DE PHYSIQUE DES REACTEURS ET DE MATHEMATIQUES APPLIQUEES)/MARCHAL,A.(SOCIETE D'ENERGIE NUCLEAIRE FRANCO-BELGE DES ARDENNES, 08 - CHOOZ-LEZ-GIVET (FRANCE))/SAMUEL,T.(NORDOSTSCHWEIZERISCHE KRAFTWERKE A.G.,DOETTINGEN.KERNKRAFTWERK BEZNAU)/
SOCIETE FRANCAISE DE L'ENERGIE NUCLEAIRE/CLAMART,FRANCE/1975/(IN FRENCH)
LA MATURITE DE L'ENERGIE NUCLEAIRE/
LEHOULIER,J./MANTEGA,M.(EDS.)/
FR/

EUROPEAN NUCLEAR CONFERENCE/
PARIS,FRANCE/
21 APR 1975/
ARDENNES REACTOR/BEZNAU-1 REACTOR/BEZNAU-2 REACTOR/CONTAMINATION:Q2/CORROSION PRODUCTS/PRIMARY COOLANT CIRCUITS:Q1,M2/
PWR TYPE REACTORS:M1/RADIONUCLIDE MIGRATION/

12/2/0000001-0000100// 97
32C0015202 NSA-32-06 77.100
PROBLEMS CONNECTED WITH WATER CHEMISTRY IN THE PRIMARY CIRCUITS OF LIGHT-WATER REACTORS/
DELLE, L. / ROZENBERG, J. / DARRAS, R. (CEA CENTRE D'ETUDES NUCLEAIRES DE SACLAY,91 - GIF-SUR-YVETTE (FRANCE).DEPT.DE RECHERCHE ET ANALYSE)/
SOCIETE FRANCAISE DE L'ENERGIE NUCLEAIRE/COURBART,FRANCE/1975/(IN FRENCH)
LA MATURITE DE L'ENERGIE NUCLEAIRE/
LEMOULIER,J./MANTEGA,R.(EDS.)/
FR/
FR/
1.EUROPEAN NUCLEAR CONFERENCE/
PARIS,FRANCE/
21 APR 1975/
77.200/
EWR TYPE REACTORS: M2 / CORROSION PRODUCTS/DECONTAMINATION/FILTRATION/PRIMARY COOLANT CIRCUITS/PURIFICATION/PWR TYPE REACTORS:M1/RADIOLYSIS/TRITIUM/WATER/WATER CHEMISTRY:Q1,Q2/

12/2/0000001-0000100// 98
32F0013928 NSA-32-06 40.450
(REG/G--3.3D(6-75))SELECTION,APPLICATION,AND INSPECTION OF PROTECTIVE COATINGS (PAINTS)FOR FUEL REPROCESSING PLANTS/
NUCLEAR REGULATORY COMMISSION,WASHINGTON,D.C.(USA).OFFICE OF STANDARDS DEVELOPMENT/
JUN 1975/NRC/
IC=9 500 983/
US/
US/
79.300/
DECONTAMINATION/FUEL REPROCESSING PLANTS:M1/MAINTENANCE/PAINTS:M2/PROTECTIVE COATINGS:Q1/REGULATORY GUIDES:Q2/

12/2/0000001-0000100// 99
32C0013272 NSA-32-05 77.700
(UNI-SA--111)DECONTAMINATION EXPERIENCE AT THE HANFORD N REACTOR/
KRATZER,W.K./LARRICK,A.P./CORBIT,C.D./
UNITED NUCLEAR INDUSTRIES,INC.,RICHLAND,WASH.(USA)/
19 APR 1975/
CONF-750537--1/DEP.NTIS $4.00./
IC=9 500 320/
US/
US/
SEMINAR ON DECONTAMINATION OF NUCLEAR PLANTS/
COLUMBUS,OHIO,USA/
7 MAY 1975/
40.420/
DECONTAMINATION/N-REACTOR:M1/REACTOR COMPONENTS:Q1/REACTOR COOLING SYSTEMS/STEAM GENERATORS/

12/2/0000001-0000100// 100
32C0013184 NSA-32-05 77.500
(KFK-EXT--6/75-1)THE CORROSION PROBLEMS IN FAST SODIUM COOLED REACTORS/
BORGSTEDT,H.U./
KERNFORSCHUNGSZENTRUM KARLSRUHE (F.R.GERMANY).INST.FUER MATERIAL- UND FESTKOERPERFORSCHUNG/
FEB 1975/
AED-CONF--74-706-001/INIS/

398 007

6.SESSION OF THE ARBEITSGRUPPE "KORROSION IN DER KERNENERGIE"/
KARLSRUHE,F.R.GERMANY/
15 OCT 1974/
50.210/
CARBON / CORROSION: 01 / CORROSION PRODUCTS / FERRITE /FUEL CANS/HEAT TRANSFER/INTERSTITIALS/LIQUID METALS/LMFBR TYPE REACTORS: M2 /MASS TRANSFER/NUCLEAR REACTIONS/QUANTITY RATIO/RADIOISOTOPES/REACTOR COMPONENTS:M1,22/SODIUM/SODIUM COOLED REACTORS/STAINLESS STEELS/STEAM GENERATORS/SUPERHEATERS/TEMPERATURE DEPENDENCE/TUBES/